OCTOBER 10, 1942

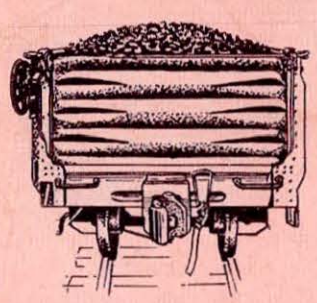
Railway Age

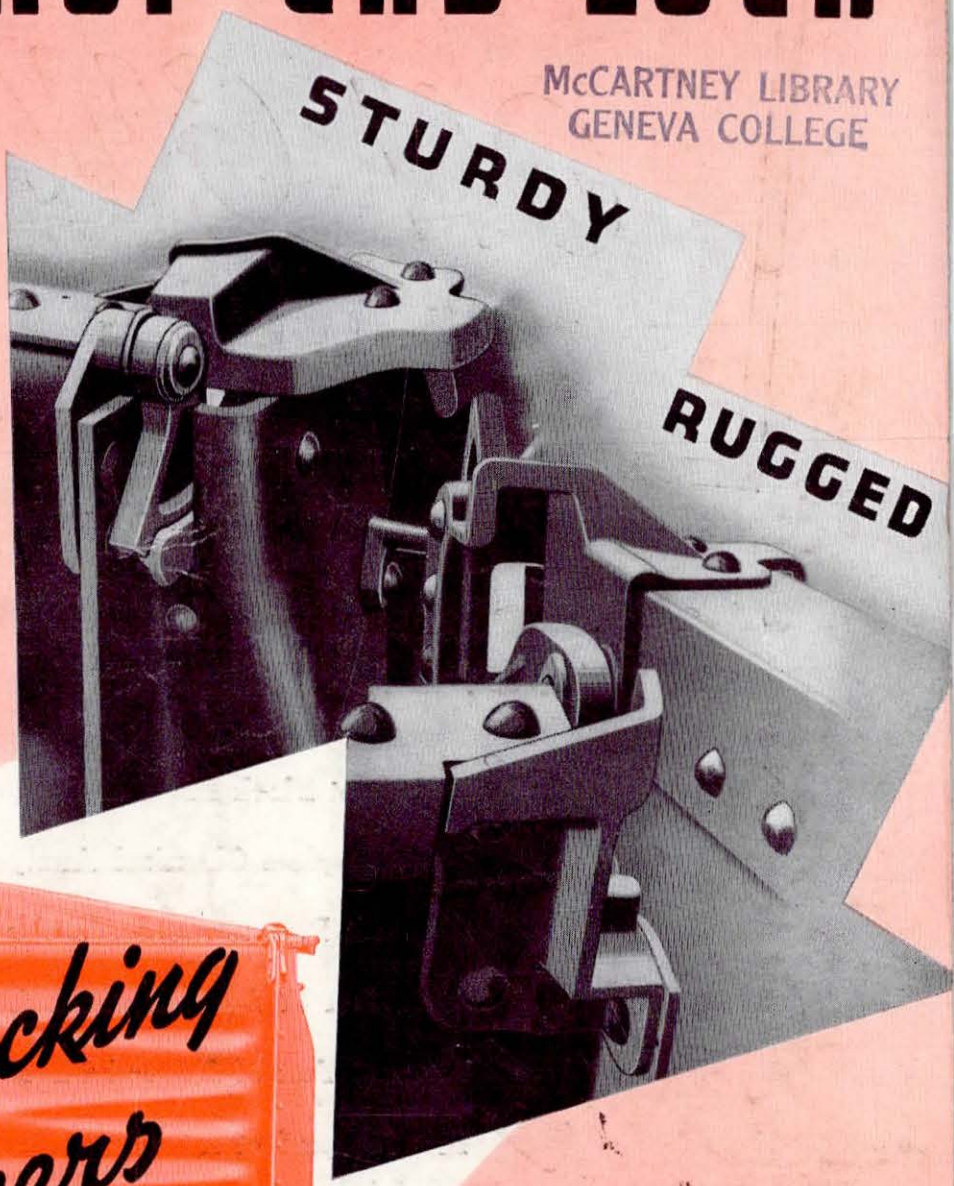
Founded in 1856

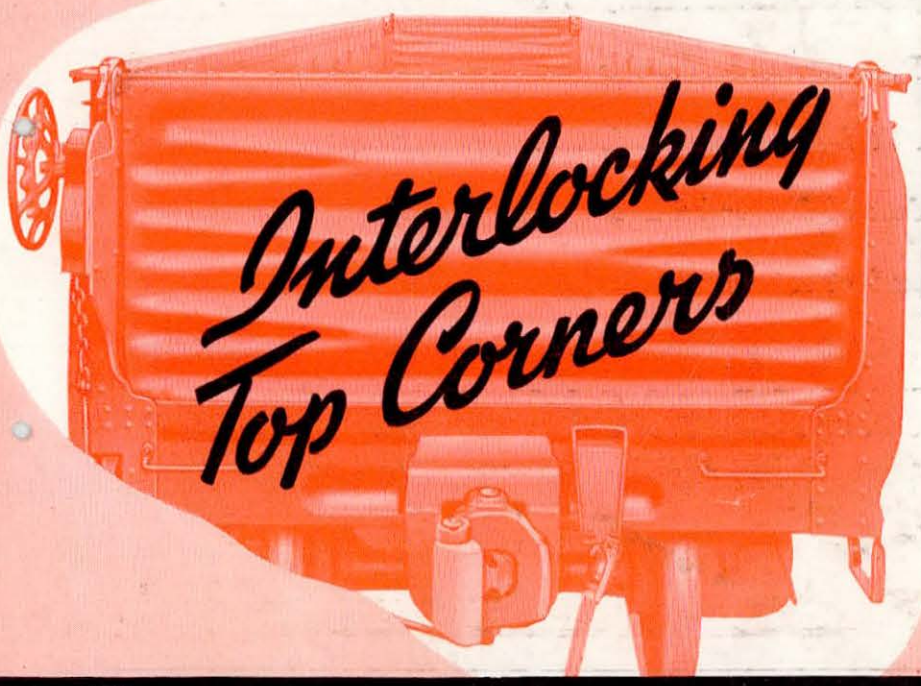
WINE DROP END LOCK

McCARTNEY LIBRARY
GENEVA COLLEGE

for Gondola Cars







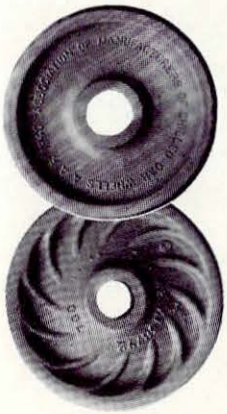
Rigid as a Solid End Car

Wine RAILWAY APPLIANCE CO. TOLEDO, OHIO

AMCCW INSPECTORS ON GUARD WITH THESE...

6 POSITIVE TESTS

SO EACH CHILLED WHEEL IS AS GOOD AS THE BEST



- Chill Test Block taken at least once in every ten wheels poured.
- One Complete Chemical Analysis Block with each heat.
- Constant Pyrometer checks for accurate process temperature.
- Drop Test of finished wheel (AAR specifications).
- Thermal Test of finished wheel (AAR specifications).
- Test for perfect rotundity.

ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS

230 PARK AVENUE,
NEW YORK, N. Y.

445 N. SACRAMENTO BLVD.,
CHICAGO, ILL.

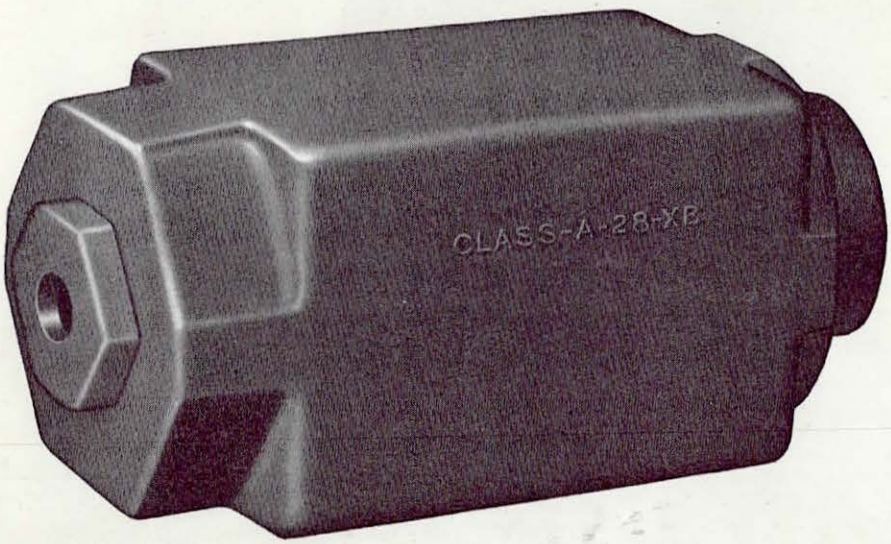
AMCCW

ORGANIZED TO ACHIEVE:
Uniform Specifications
Uniform Inspection
Uniform Product

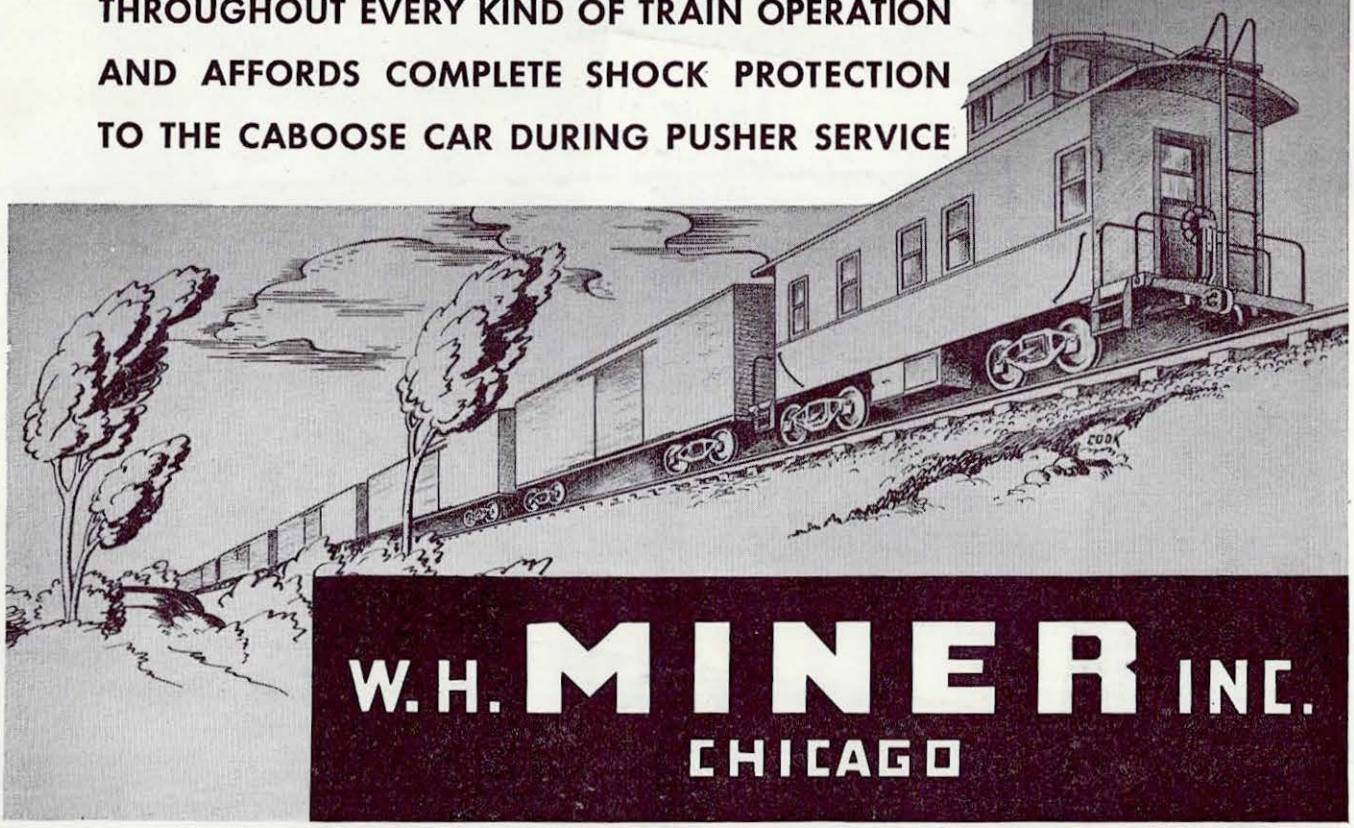
Published weekly by Simmons-Boardman Publishing Corporation, 1309 Noble Street, Philadelphia, Pa. Entered as second class matter, January 4, 1933, at the Post Office at Philadelphia, Pa., under the act of March 3, 1879. Subscription price $6.00 for one year U. S. and Canada. Single copies, 25 cents each. Vol. 113, No. 15.

MINER

CLASS A-28-XB DRAFT GEAR *for* CABOOSE CARS



PROVIDES UTMOST COMFORT TO THE TRAINMEN THROUGHOUT EVERY KIND OF TRAIN OPERATION AND AFFORDS COMPLETE SHOCK PROTECTION TO THE CABOOSE CAR DURING PUSHER SERVICE



W. H. MINER INC.
CHICAGO

Steel mills need

Three months' "Scrap Drive" yields one railroad several hundred cars of scrap plus reclaimable materials

Did you read the article "Scrap for Victory" in the July 4th issue of Railway Age? Get a copy and look it over. Here is a working blueprint of a highly successful scrap drive that gives facts and figures that will help you immeasurably in instituting a similar campaign for your company. Not only was the procedure discussed instrumental in getting a tremendous supply of scrap and reclaimable material, but the fact is emphasized that this well organized and successful drive was the most effective means so far discovered in teaching the employees the importance of scrap and how to conserve materials.

Railroad SCRAP . . now!

Enough steel for the Nation's war needs can't be made without scrap

THE need is urgent. The steel industry is faced with the tremendous task of producing even more than was produced last year which was the biggest year in its history. Almost twice as much as the Axis powers combined.

Every ton of new steel requires about half a ton of scrap. That means we have to find at least 140,000 tons a day of this precious junk somewhere to meet 1942 requirements. One of the best sources of scrap is the railroad industry. Not merely because of the enormous tonnage that is available but because so much railroad scrap comes in heavy pieces. That means less work to prepare it for the furnace. Much railroad scrap not only makes better steel—it also helps to speed up production.

Are you doing your share in this important part of the National war effort? Are you getting in the scrap? Many leading railroads already have set substantial scrap drives in motion—and with amazing results. Under the leadership of well organized and hard-driving scrap committees, they are combing their properties from end to end. To the surprise of both management and salvage forces, they are unearthing scrap in enormous quantities from hidden and unexpected sources and at the same time are locating many idle tools and much reclaimable material that the railroads themselves can make good use of.

ORGANIZE A DEFINITE "SCRAP CAMPAIGN"

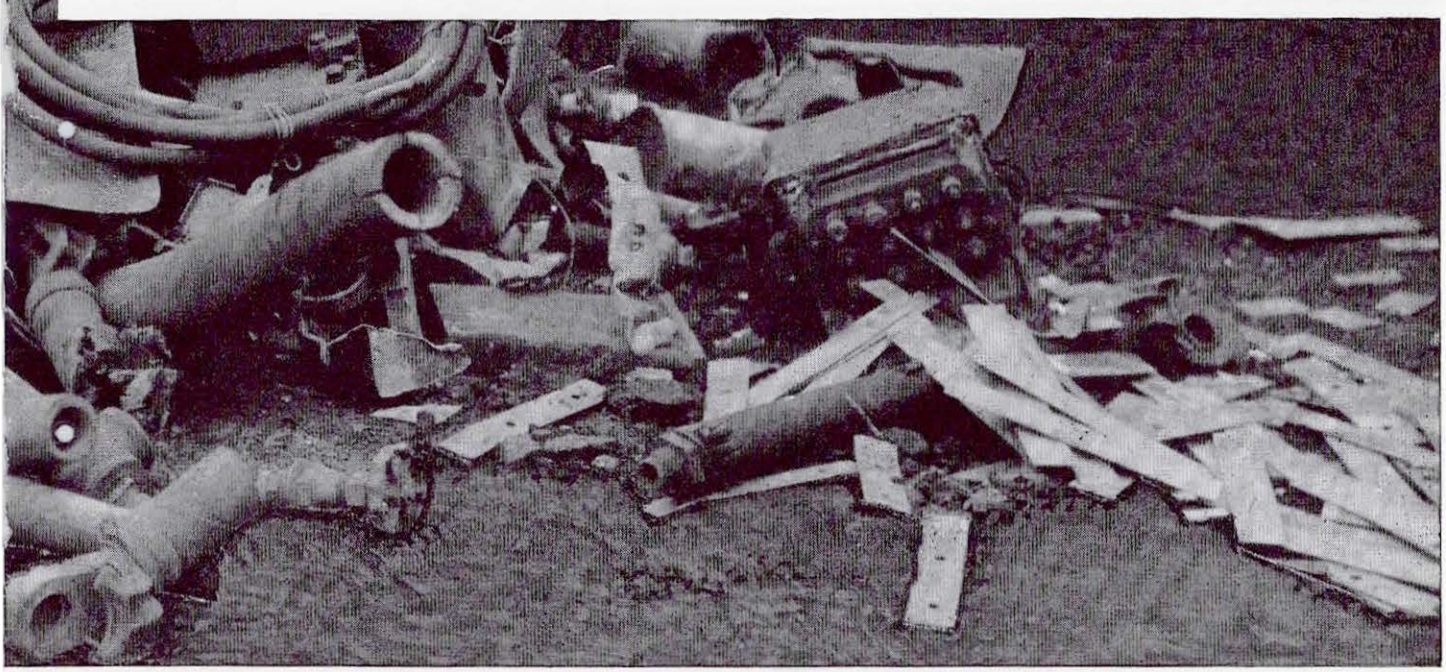
To be successful, every scrap drive must be definitely organized and have executive backing. It needs a spark plug—a promoter who can get action from your entire organization. If this is *not* done, any drive for scrap you start will be only partially successful and much valuable iron and steel will be lost to the nation's war effort.

☆ *Get in the scrap for Victory* ☆

AMERICAN STEEL & WIRE COMPANY, *Cleveland, Chicago and New York*
CARNEGIE-ILLINOIS STEEL CORPORATION, *Pittsburgh and Chicago*
COLUMBIA STEEL COMPANY, *San Francisco*
NATIONAL TUBE COMPANY, *Pittsburgh*
TENNESSEE COAL, IRON & RAILROAD COMPANY, *Birmingham*

Scully Steel Products Company, Chicago, *Warehouse Distributors* · United States Steel Export Company, New York

UNITED STATES STEEL



OXY-ACETYLENE
Eliminates

PRESSURE-WELDED RAIL..

Batter and Joint Maintenance

WHEN Oxweld's pressure-welding method is used to join rails, a continuously smooth surface is provided, maintenance of joints and signal bonds is done away with, and the possibility of rail end batter is eliminated.

Pressure-welded rail is being used increasingly in a variety of locations. In tunnels, for example, the smooth surfaces of pressure-welded rails are free from depressions and pockets that catch moisture, dripping water, and gases that cause rail corrosion. Difficult maintenance work is thus greatly reduced.

When rail on bridges is joined by pressure welding, the smooth-riding surface substantially reduces impact. Pressure-welded rails have also proved their worth in station platforms where traffic is usually heavy and maintenance difficult. Once the rails are laid—and covered, if desired—the matter of joint maintenance can be forgotten. These and other advantages of pressure-welded rail make it particularly suitable not only in these locations, but also in road crossings, on overhead structures, and in open track, where maintenance conditions are difficult, and in addition, it should be considered for use in lead rails through switches.

Your Oxweld representative will be glad to give you the latest information on how pressure-welded rail can be used to advantage on your road.

THE OXWELD RAILROAD SERVICE COMPANY

Unit of Union Carbide and Carbon Corporation

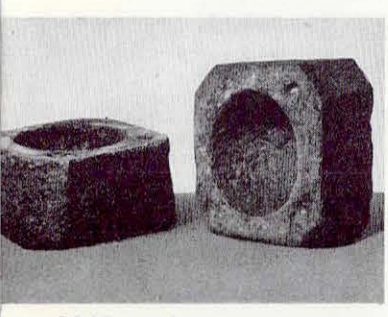
Carbide and Carbon Building UCC **Chicago and New York**

Since Oxweld's equipment for pressure welding rails is limited, welding schedules should be planned now in advance so as to obtain the full utility of available equipment through the fall and winter months, and thus to have your next season's pressure-welded rails ready when needed.

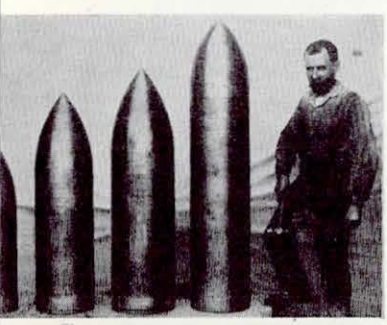
SINCE 1912—THE COMPLETE OXY-ACETYLENE SERVICE FOR AMERICAN RAILROADS

1742

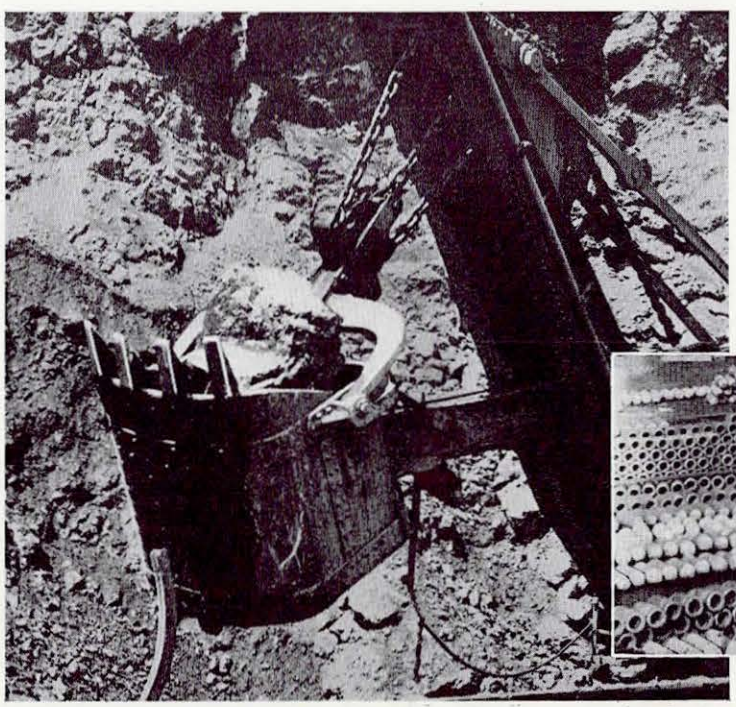
200th Anniversary



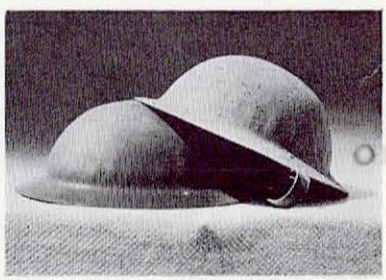
Mold used to cast cannon balls for the Continental Army. 1775-1781



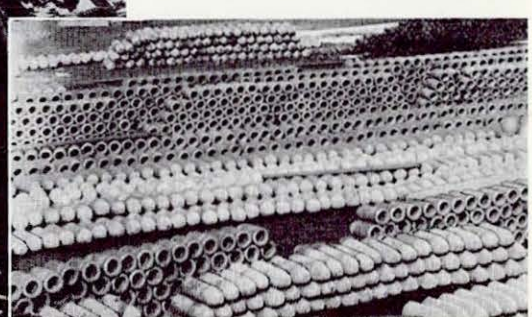
Cast steel projectiles made for U.S. Navy during Spanish-American War.



The Panama Canal was dug to a great extent by power shovels fitted with "Panama" patented Two-Part Teeth, of Tisco Manganese Steel made at our High Bridge Plant. This photograph shows a shovel in operation during construction of the Canal.



U. S. Army helmets made of Tisco Manganese Steel during World War I.

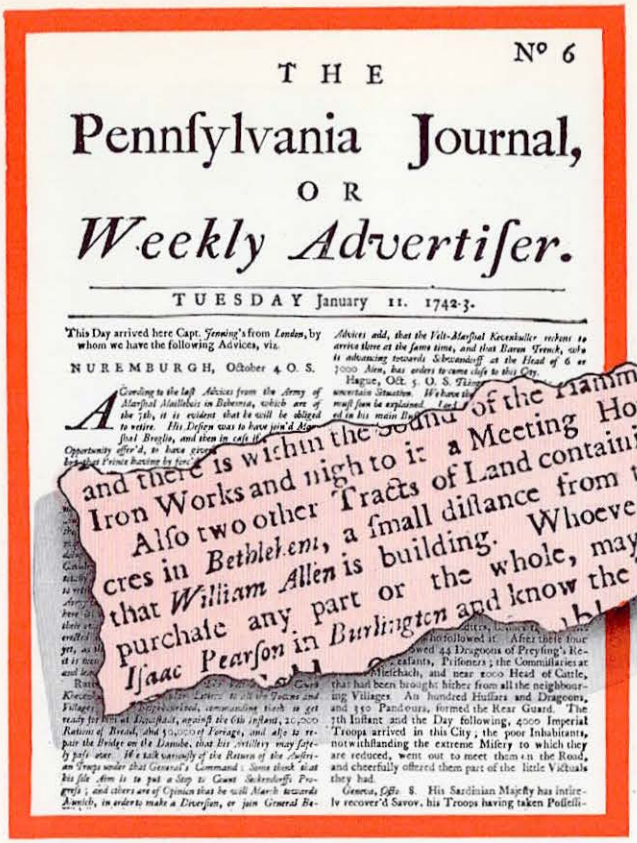


9.2" shell forgings made for World War I.

1742 TW 1942

TAYLOR • WHARTON

1942



THE Nº 6

Pennsylvania Journal,

OR

Weekly Advertiser.

TUESDAY January 11. 1742-3.

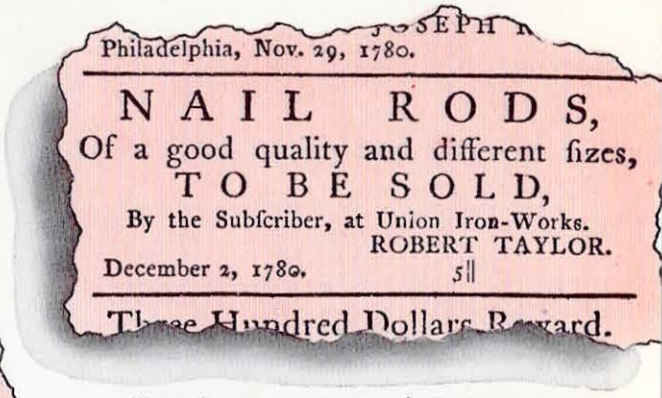
'This Day arrived here Capt. *Fenning's* from *London*, by whom we have the following Advices, viz.

NUREMBURGH, October 4 O. S.

According to the last Advices from the Army of Marshal Maillebois in Bohemia, which are of the 5th, it is evident that he will be obliged to retire. His Design was to have join'd Mar-shal Broglio, and then in case the Opportunity offer'd, to have gone [illegible]

and there is within the sound of the Hammer several Iron Works and nigh to it a Meeting House. Also two other Tracts of Land containing 500 Acres in *Bethlehem*, a small distance from the Furnace that *William Allen* is building. Whoever inclines to purchase any part or the whole, may treat with *Isaac Pearson* in *Burlington* and know the Terms.

First newspaper reference to this Company. In the above issue of Tuesday, January 11, 1742-3, of The Pennsylvania Journal, note the mention of "the furnace that William Allen is building."



Philadelphia, Nov. 29, 1780.

NAIL RODS,

Of a good quality and different sizes,

TO BE SOLD,

By the Subscriber, at Union Iron-Works.

ROBERT TAYLOR.

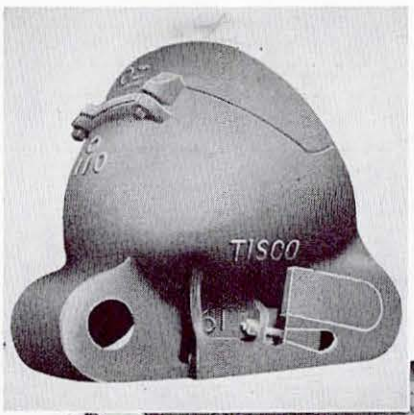
December 2, 1780. 5||

Three Hundred Dollars Reward.

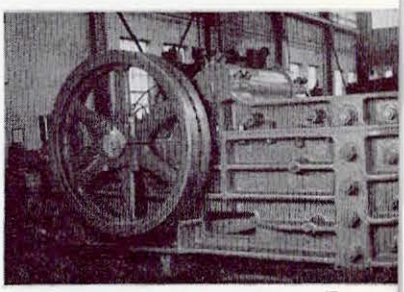
First advertisement using the Taylor name. The above clipping is from the New Jersey Gazette, December 6, 1780.

COINCIDENT WITH THE 50th ANNIVERSARY OF HADFIELDS MANGANESE STEEL IN AMERICA, FIRST PRODUCED AT HIGH BRIDGE, NEW JERSEY, ON OCTOBER 29, 1892

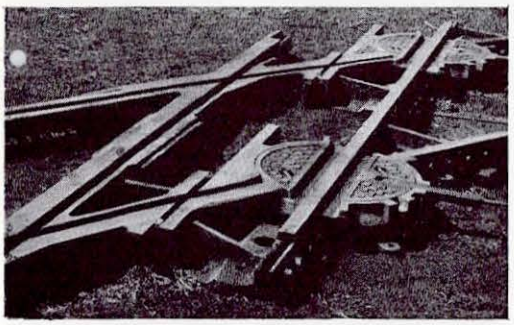
155 M.M. shells made for U.S. Army for present World War.



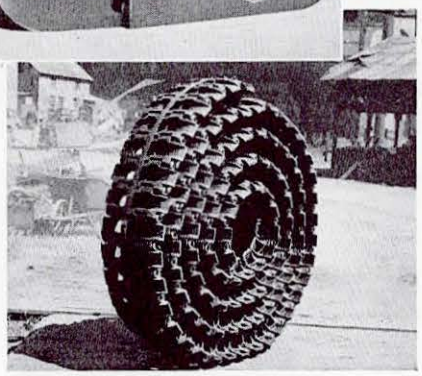
Photograph at left shows a Tisco Patented Rivetless Bucket made for placer dredges.



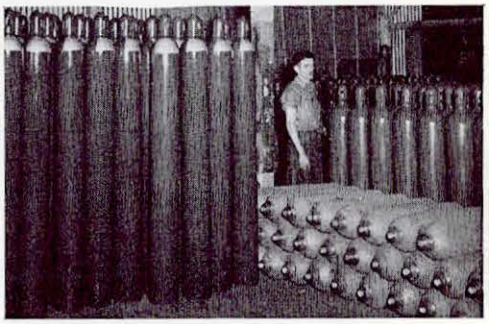
Crusher with wearing parts of Tisco Manganese Steel.



Special trackwork for railroads and Army and Navy installations.

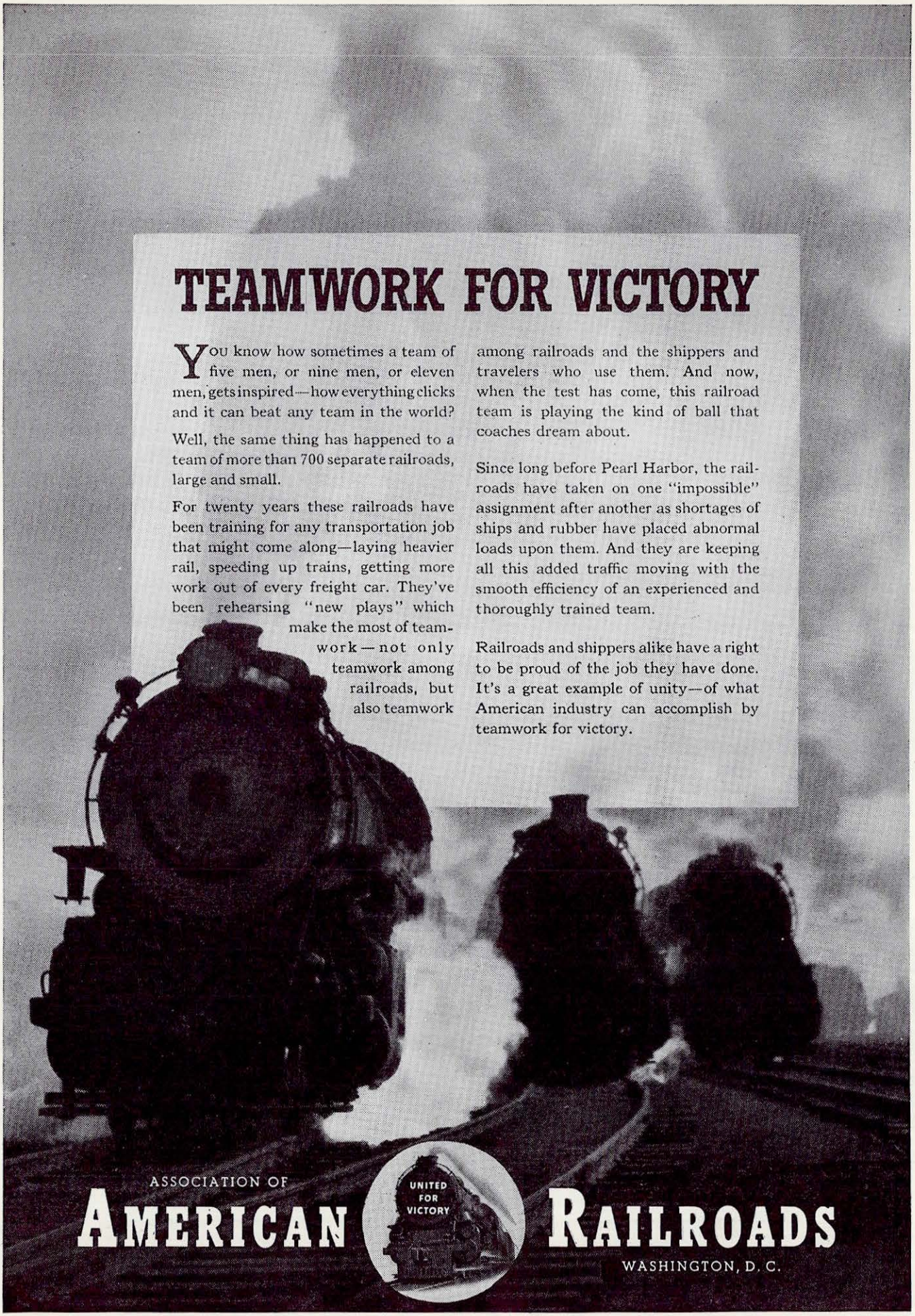


Tisco Manganese Steel Tank treads for World War I and present World War.



Seamless high pressure gas cylinders for all compressed and liquefied gases.

IRON AND STEEL COMPANY


TEAMWORK FOR VICTORY
You know how sometimes a team of five men, or nine men, or eleven men, gets inspired—how everything clicks and it can beat any team in the world?
Well, the same thing has happened to a team of more than 700 separate railroads, large and small.
For twenty years these railroads have been training for any transportation job that might come along—laying heavier rail, speeding up trains, getting more work out of every freight car. They've been rehearsing "new plays" which make the most of teamwork—not only teamwork among railroads, but also teamwork among railroads and the shippers and travelers who use them. And now, when the test has come, this railroad team is playing the kind of ball that coaches dream about.
Since long before Pearl Harbor, the railroads have taken on one "impossible" assignment after another as shortages of ships and rubber have placed abnormal loads upon them. And they are keeping all this added traffic moving with the smooth efficiency of an experienced and thoroughly trained team.
Railroads and shippers alike have a right to be proud of the job they have done. It's a great example of unity—of what American industry can accomplish by teamwork for victory.
ASSOCIATION OF
AMERICAN
UNITED FOR VICTORY
RAILROADS
WASHINGTON, D. C.

"Damage Ratio Lowest in History"*

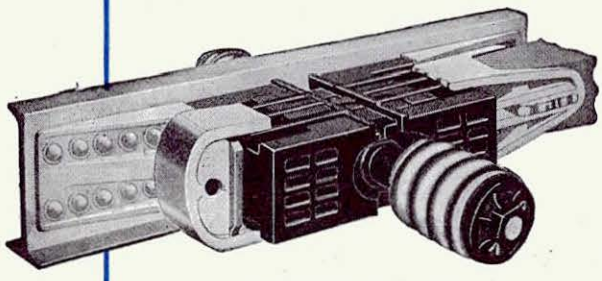
"The ratio of freight loss and damage to gross freight revenue in 1941 was the lowest in history. * * * * Claim payments of Class I American railroads last year were 0.50 percent of the revenue as compared with 0.57 percent in 1940—a drop of 12.3 percent."—A. E. Pasman, Chairman Freight Claim Division, A. A. R.

*RAILROAD DATA May 8 1942

This record has been accomplished in a period of continually increasing speeds and heavier traffic. It is due not only to more careful handling of equipment, but also to the increased utilization of continuously-improved high shock-absorbing and shock-dissipating devices, which give maximum protection to cars and lading.

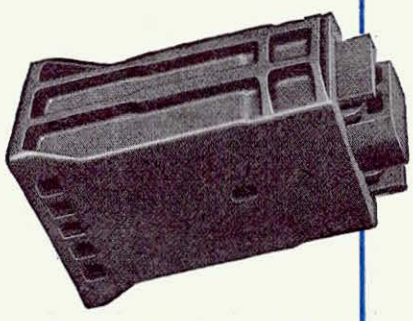
Over 96% of railroad cars in freight carrying service are equipped with Friction DRAFT GEARS, which are playing an important part in making the above record possible.

There are also several hundred thousand cars equipped with Friction Bolster Springs, snubbers and truck-stabilizing arrangements—devices which absorb and dissipate vertical shock energy before it reaches the car body.



CARDWELL L-25-SA FRICTION DRAFT GEAR (Certified A. A. R.)

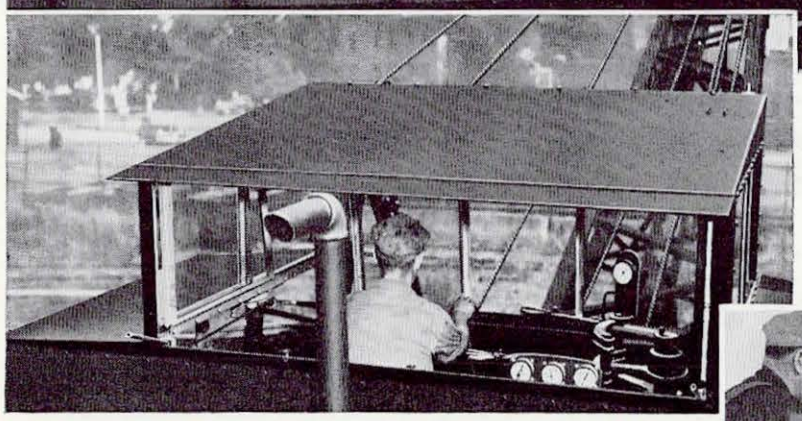
CARDWELL FRICTION BOLSTER SPRING, TYPE A



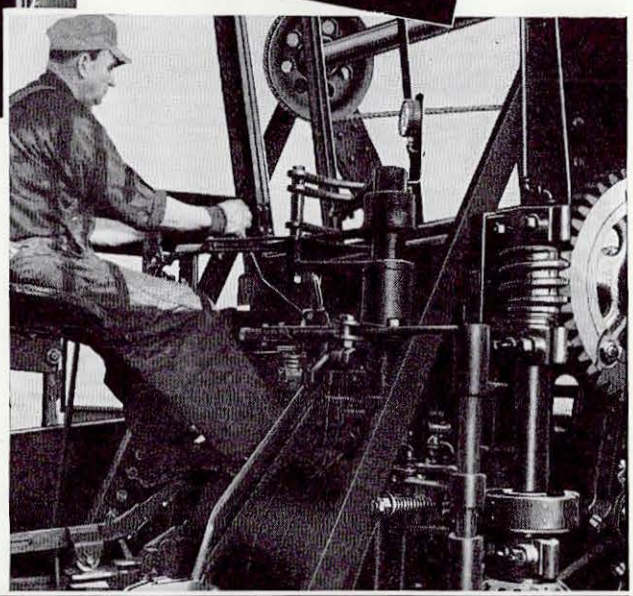
WESTINGHOUSE NY-11-E FRICTION DRAFT GEAR (Certified A. A. R.)

CARDWELL WESTINGHOUSE CO., CHICAGO
CANADIAN CARDWELL CO., LTD., MONTREAL

I.B. CRANES SPEED UP MATERIAL HANDLING



THROW YOUR SCRAP INTO THE FIGHT!



In these days when every minute of production time is doubly precious, the extra efficiency of I. B. Cranes is more vital than ever. The patented Monitor-type cab on gas and diesel cranes through 40 tons capacity speeds up operator production by providing 360° visibility, better ventilation and less noise. Operating levers and clutches are conveniently placed for greater ease of control. Undercarriage, rotating gears, crab mechanism, power plant, boom and rigging are all designed and built to do a faster, uninterrupted job of material handling.

Whether you use magnet, hook or bucket, it will pay you to operate an I. B. Crane. Write today for further facts.

INDUSTRIAL BROWNHOIST BUILDS BETTER CRANES

GENERAL OFFICES: BAY CITY, MICHIGAN • DISTRICT OFFICES: NEW YORK, PHILADELPHIA, PITTSBURGH, CLEVELAND, CHICAGO

Baldwin serves the Nation which the Railroads helped to build

A SOLDIER WITH A 5000-TON PACK

Locomotives have assumed their rightful place alongside other items of essential war equipment. They are fighting America's battles by hauling the men and materials needed by the armed forces and by industries engaged in war production.

The American railroads are breaking all previous records for ton-miles of freight per month. Passenger traffic, much of which is composed of military personnel, is the largest in history.

Modern steam locomotives, many of which were built by Baldwin, are helping to make possible these high-speed, heavy-tonnage records. Baldwin diesel-electrics are helping in yards and terminals.

In addition to the production of these essential locomotives, Baldwin is devoting its skill and facilities to the manufacture of military tanks, guns, gun mounts and other implements of war.

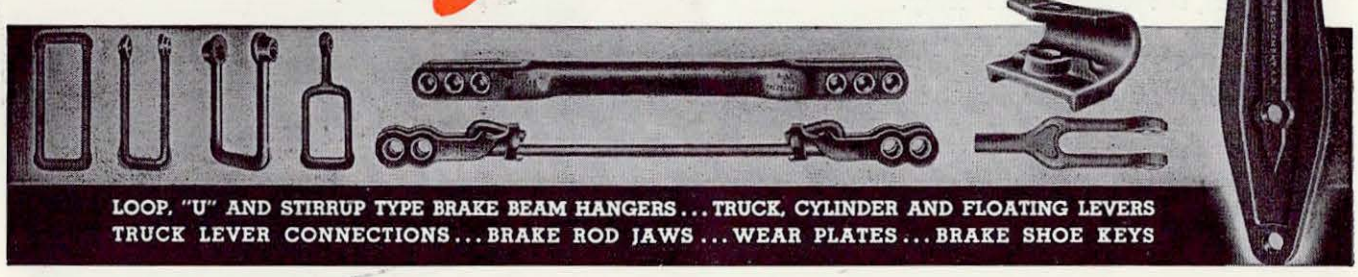
THE BALDWIN LOCOMOTIVE WORKS Philadelphia

Less Weight Longer Life

Schaefer Forged Steel Foundation Brake Gear Parts make for minimum service replacements. They are standard on 80% of cars in service.

Schaefer EQUIPMENT COMPANY

KOPPERS BUILDING • PITTSBURGH, PA.



LOOP, "U" AND STIRRUP TYPE BRAKE BEAM HANGERS ... TRUCK, CYLINDER AND FLOATING LEVERS
TRUCK LEVER CONNECTIONS ... BRAKE ROD JAWS ... WEAR PLATES ... BRAKE SHOE KEYS

We're proud of this "E" but our goal is "V"

"The patriotism which you and your employees have shown by your remarkable production record is helping our country along the road to Victory. The Army and Navy are proud of the achievement of the men and women of the Union Steel Castings Division . . ."

James Forrestal

Under Secretary
Department of the Navy

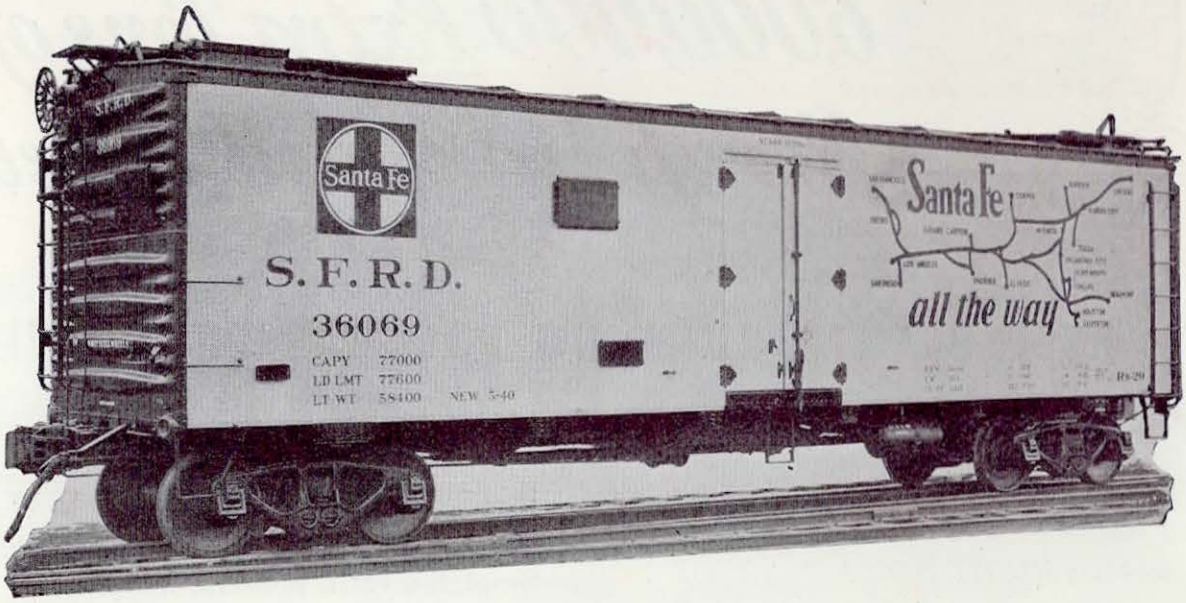
(quoted from a letter, dated Sept. 5, 1942, conferring the Army-Navy "E" on Union Steel Castings Division of Blaw-Knox Co.)

To us, this "E" is far more than a source of pride. It is our inspiration to do even better in the future than we have in the past. It shall serve as a constant reminder of our pledge to give all our strength, all our time, all we have and are to the cause of Liberty.

UNION STEEL CASTINGS
DIVISION OF
BLAW-KNOX COMPANY
Pittsburgh, Pa.

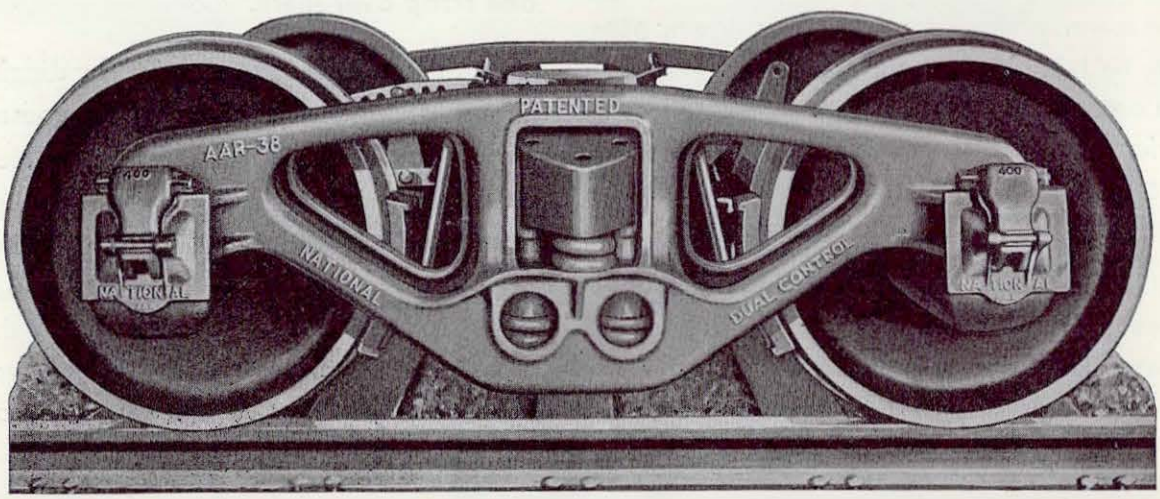
Armor for Tanks and Naval Construction • Gun Castings, Slides and Stands • Steel Castings for Locomotives • Castings for the Iron and Steel Industry • Miscellaneous Industrial Castings

NATIONAL B-1 TRUCKS
with
DUAL CONTROL
Will Keep 'Em Rolling



IN the present emergency it is necessary that cars and lading reach their destination as quickly as possible and in good condition.

National B-1 Trucks with Dual Control prevent damaging spring oscillations, assure a smooth riding car at high speeds, thus tending to keep car in good running order and prevent damage of products in transit.



NATIONAL MALLEABLE AND STEEL CASTINGS CO.
General Offices: CLEVELAND, OHIO
Sales Offices: New York, Philadelphia, Chicago, St. Louis, San Francisco
Works: Cleveland, Chicago, Indianapolis, Sharon, Pa., Melrose Park, Ill.

Canadian Representatives: Railway and Power Engineering Corporation, Ltd., Toronto and Montreal

We're proud of this "E" but our goal is "V"

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Armor for Tanks and Naval Construction • Gun Castings, Slides and Stands • Steel Castings for Locomotives • Castings for the Iron and Steel Industry • Miscellaneous Industrial Castings

Exide
IRONCLAD BATTERIES

THE more we save, the more we'll have. That's most important today. Wasteful buying, and wasteful misuse of equipment, are *out* for good.

Remember this, when caring for your dependable, long-lived Exide Batteries. Follow the simple rules printed on this page, follow them faithfully . . . and you're really working for America. Take care of your equipment, and help a lot of fighting Yanks take care of the Axis.

YOUR SCRAP will help WIN

AND HERE'S OUR PRESCRIPTION FOR BATTERY CARE!

1. Keep adding approved water at regular intervals. Most local water is safe. Ask us if yours is safe.
2. Keep the top of the battery and battery container clean and dry at all times. This will assure maximum protection of the inner parts.
3. Keep the battery fully charged—but avoid excessive over-charge. A storage battery will last longer when charged at its proper voltage.
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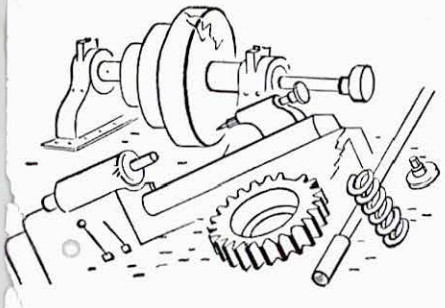

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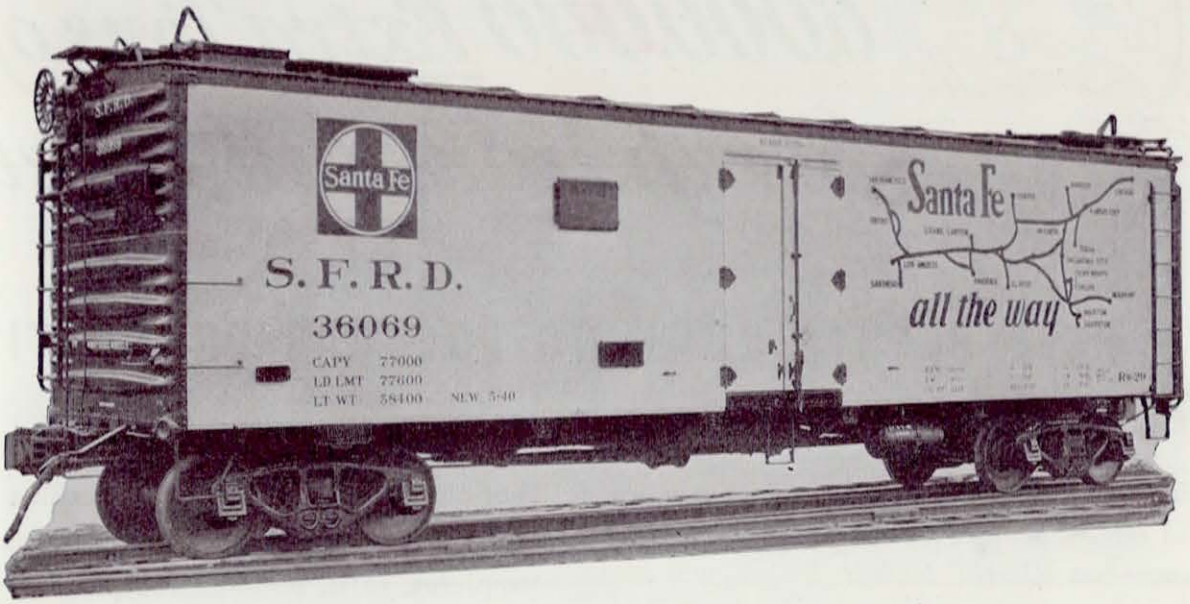

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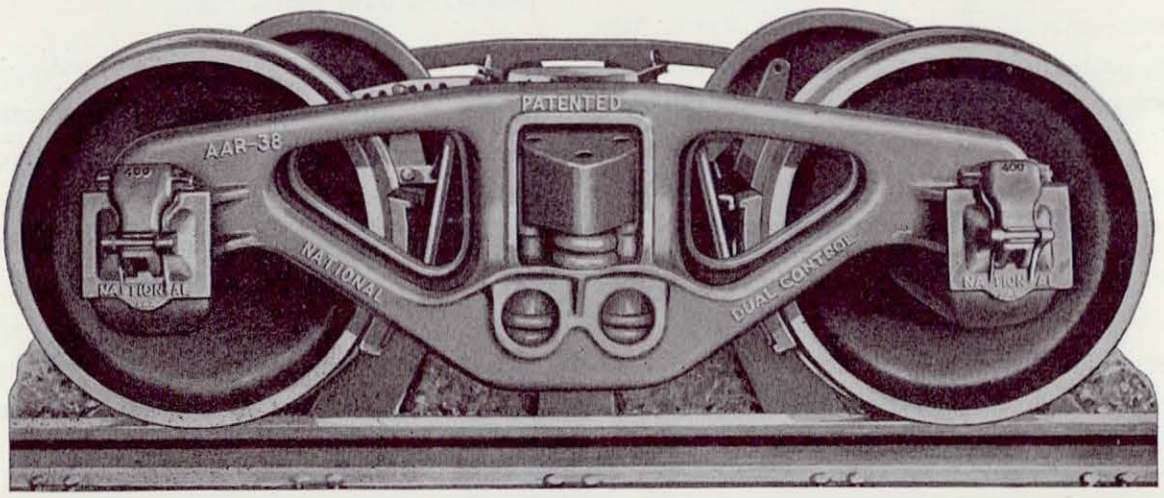

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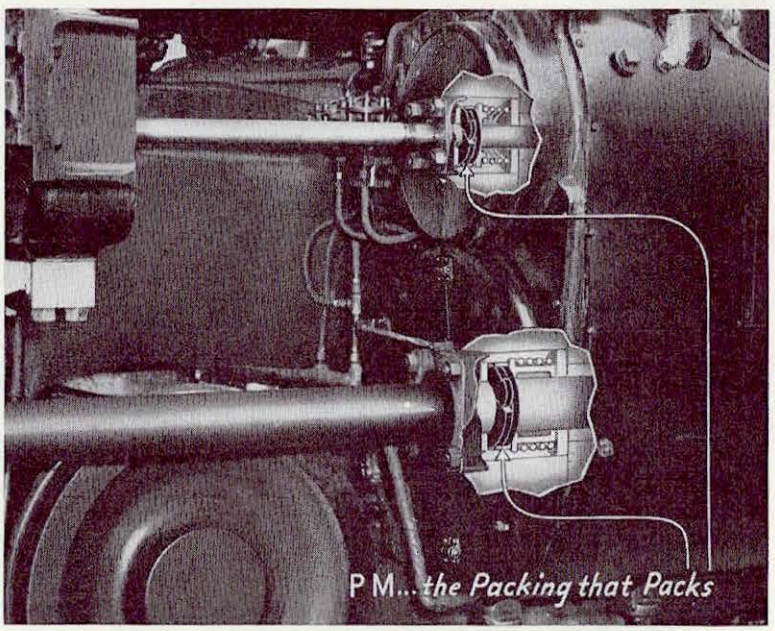

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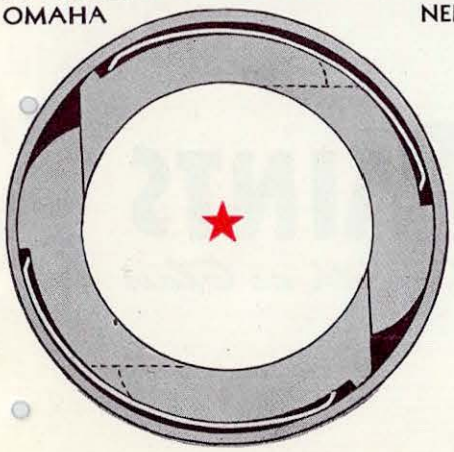

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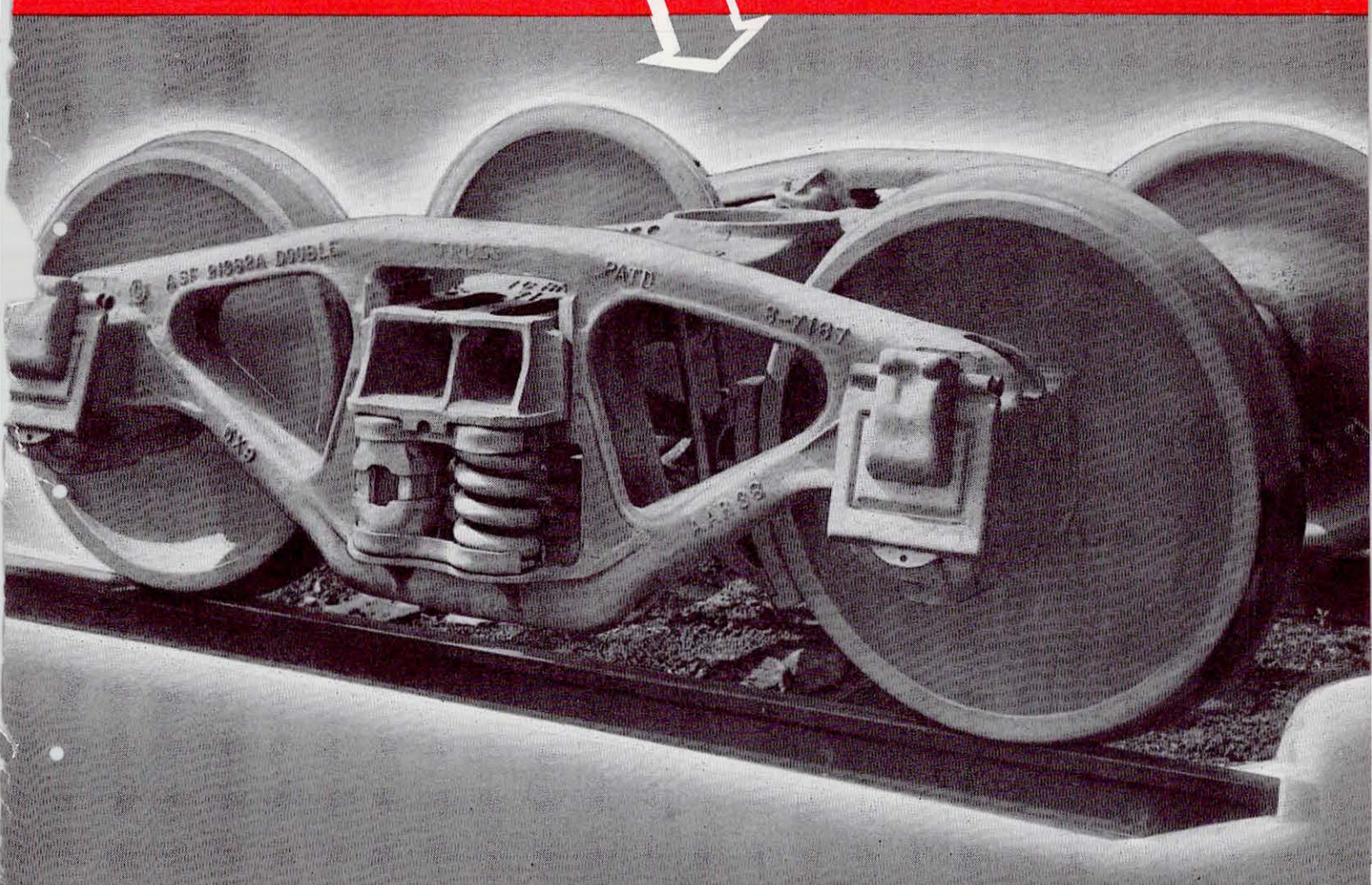

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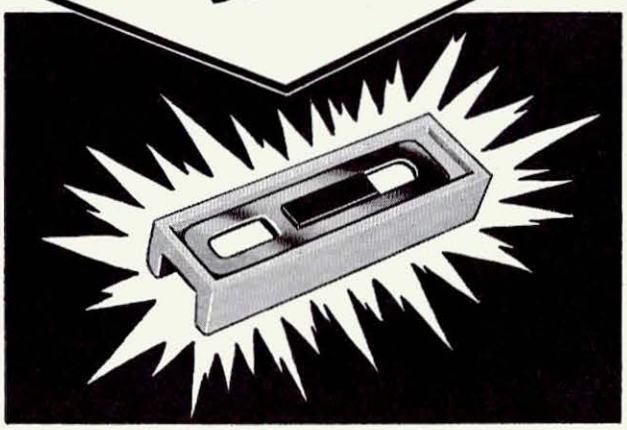

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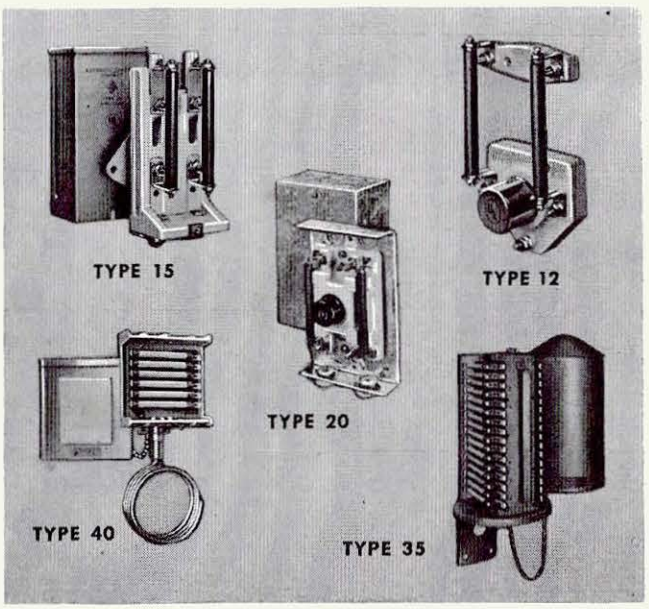

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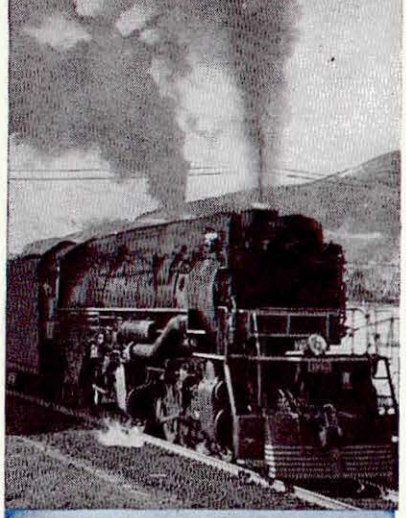

PUBLISHED EACH SATURDAY BY THE SIMMONS-BOARDMAN PUBLISHING CORPORATION, 1309 NOBLE STREET, PHILADELPHIA, PA., WITH EDITORIAL AND EXECUTIVE OFFICES AT 30 CHURCH STREET, NEW YORK, N. Y., AND 105 W. ADAMS STREET, CHICAGO, ILL.

WASHINGTON, D. C.: 1081 NATIONAL PRESS BUILDING. CLEVELAND: TERMINAL TOWER. SEATTLE: 1038 HENRY BUILDING. SAN FRANCISCO: 300 MONTGOMERY STREET, ROOMS 805-806. LOS ANGELES: 530 WEST 6th STREET.

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SUBSCRIPTIONS, INCLUDING 52 REGULAR WEEKLY ISSUES, AND SPECIAL DAILY EDITIONS PUBLISHED FROM TIME TO TIME IN NEW YORK, OR IN PLACES OTHER THAN NEW YORK, PAYABLE IN ADVANCE AND POSTAGE FREE. UNITED STATES, U. S. POSSESSIONS AND CANADA: 1 YEAR, $6.00; 2 YEARS, $10.00; FOREIGN COUNTRIES, NOT INCLUDING DAILY EDITIONS: 1 YEAR, $8.00; 2 YEARS, $14.00. SINGLE COPIES, 25 CENTS EACH. H. E. McCANDLESS, CIRCULATION MANAGER, 30 CHURCH STREET, NEW YORK.

Railway Age

With which are incorporated the Railway Review, the Railroad Gazette and the Railway Age-Gazette. Name registered U. S. Patent Office.

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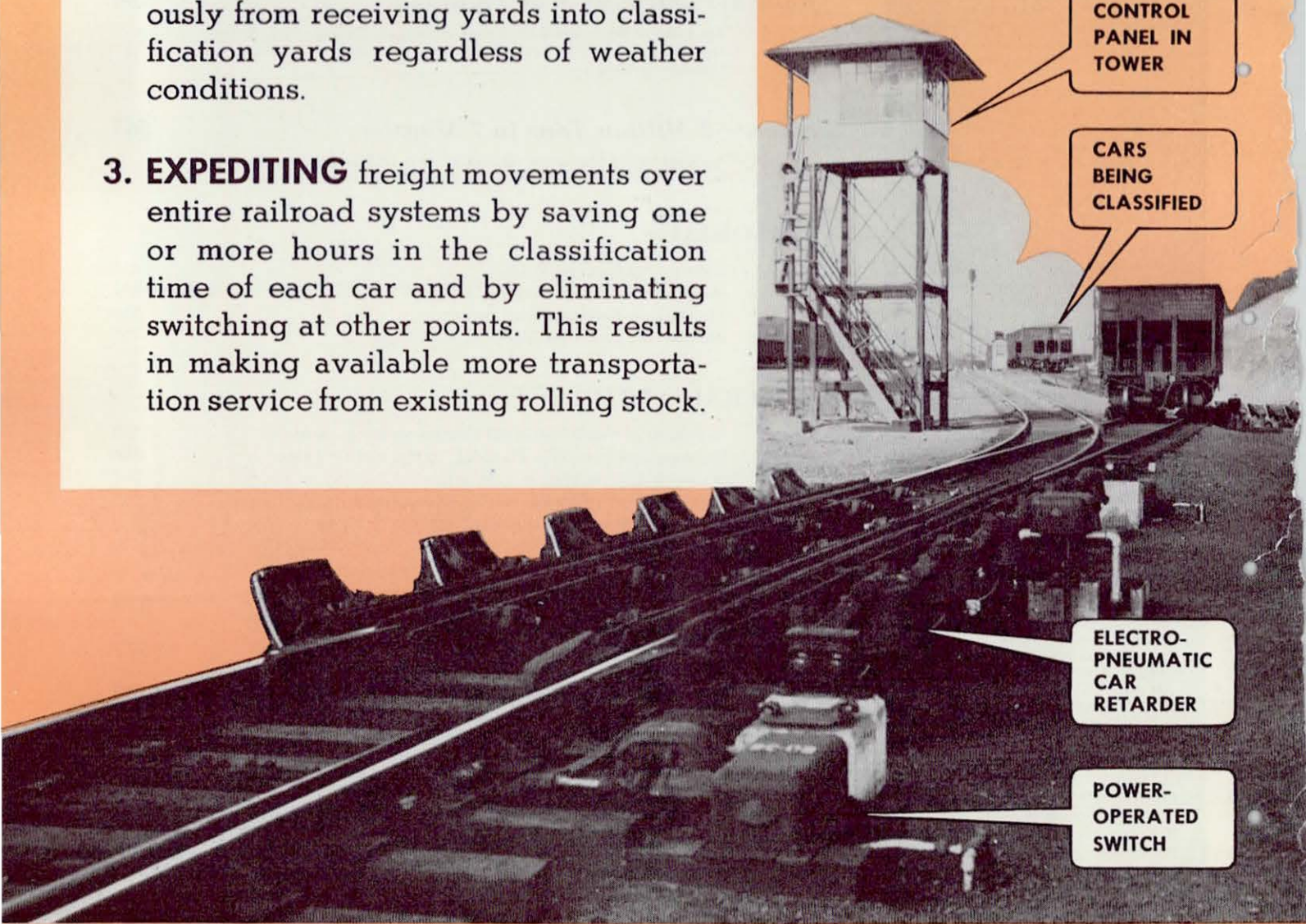

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The Week at a Glance

BRANCH LINES GO TO WAR: Seizures of rail from railroad branch lines by the WPB were scrutinized this week by a sub-committee of the Senate interstate commerce committee in an inquiry initiated by Senator Clyde Reed (Rep., Kan.). A WPB witness testified that it was taking this rail (1) upon advice by the Army that the branch line affected was not needed for national defense and (2) upon ODT advice that the line was not required to meet the transportation demands of the war production program. He conceded that the usual weighing of "public convenience and necessity" by the I. C. C. was not being awaited and contended that present exigencies would not permit such consideration. He said that military needs for the second half of 1942 total more than 60,000,000 ft. of rail and, so far, less than 12,000,000 ft. have been obtained. 1200 miles of track have already been taken up under the program and 100 additional projects are under consideration.

●

A NEW "CHANDLER" LAW: The revived "Chandler bill"—permitting railroads to recast their financial structures without reorganization—has been enacted by Congress, and sent to the President. Final action came when the House accepted a Senate amendment, limiting the effectiveness of the measure to projects initiated before November 1, 1945.

●

SENATE TAX BILL: The Senate has got the tax bill from its finance committee and will talk it over for a week or two. The measure, as reported, does away with the proposed 5 per cent tax on freight rates (opposed by the OPA because of its inflationary threat on food prices). It raises the tax on passenger transportation from 5 to 10 per cent (exempting furloughed service men). Railroads will be allowed, as the measure was reported, to buy in their securities at depreciated prices without being taxed on the paper "profit" or being first declared insolvent. For computing taxes of reorganized companies, the property bases of the old company are accepted. Some rather statesmanly architecture in this measure, but, then, these enlightened features are not yet the law.

●

"STABLE" WAGES: The new price and wage "stabilization" legislation and the President's order pursuant thereto put a "ceiling" on wage rates at the September 15 level—only such alterations being permitted as necessary to "correct maladjustments" or "inequities." Our Washington editor—in his interpretative report in the news pages herein—points out that the present non-ops wage case can be decided by the usual machinery of the Railway Labor Act, but, if this process results in recommendations for pay increases, these would have to receive the okay of the War Labor Board before they could be made effective. Then, if the WLB authorizes wage increases which Leon Henderson thinks would require an increase in prices (including, presumably, railroad rates), such wage increases cannot be applied unless approved by the director of economic stabilization (Judge Byrnes). The I. C. C. still has control of rates, but the OPA is authorized to intervene in rate cases (which it has been doing anyhow).

●

UP TO ADMINISTRATORS: The language of the law and the President's order appear to permit wide discretion to the administrative personnel who will put them into effect. Who can tell what the administrators will do? Their record up to now is not too reassuring. The War Labor Board has heretofore found its own reasons for steadily boosting wages, and for extending the closed shop—although, lately, its application of the "Little Steel" formula represents somewhat of a deceleration in its inflation-promoting policy. Is the war and the threat of inflation now deemed sufficiently serious so that they will replace "social objectives" as WLB's primary concern? Only time will reveal.

●

RRS MERE CIVILIANS?: An editorial herein points out that the WPB classifies the railroads as a civilian industry —despite the primary dependence of the whole war program on efficient railroad transportation. This inaccurate and *déclassé* status undoubtedly induces—at any rate to some degree—the niggardly treatment the carriers have been getting in materials allocations. The editorial suggests that the carriers are suffering from *too academic an approach* by the Transportation Equipment Branch of WPB to the processes of procuring and fabricating materials for railway equipment.

●

'44 TIE TIME IS HERE: It takes 12 to 18 months to produce, season and treat a railroad tie. Since the carriers already have their 1943 tie supply lined up, there is a disposition not to worry too much about a period as far off as 1944. An editorial in this issue shows how wrong such an opinion is, and how dangerous to continued efficient transportation service. The woodsmen who produce the ties are going into military service and into industries which are recognized as "war industries," which the railroads are not. Ceiling prices have further discouraged production.

●

WHO GETS THE MONEY?: Since 1932, the average monthly pay of railroad officers has risen $34, or 6 per cent, and the average pay of employees $46, or almost 33 per cent. Thus the trend of equalization of income goes on—although there has been no similar equalization of ability and effort. The leading editorial herein presents these and other figures of similar import in analyzing the trends of salaries, as compared to wages, and comparative taxation thereon. The question is raised of what effect equalization of pay will have on industrial and transportation efficiency and progress—which have heretofore advanced because of the special rewards they held out to induce the able and the energetic to exert themselves.

MATERIALS OUTLOOK: L. M. Betts of the Car Service Division in a speech reported in the news pages says that "it would be difficult, if not disastrous, to attempt segregation of traffic by priorities. Only through reasonable increases in plant capacity through allocation of necessary materials can we be certain of meeting the increased traffic load which quite certainly lies ahead in the coming year." Mr. Eastman, however, speaking at New York and Boston, revealed that the WPB is insisting that "excess transportation be curtailed" before it will turn loose steel for more equipment.

●

BRIEFS ON "PUBLIC AIDS": Wednesday of this week was "brief day" at the Transport Study Board—interested parties filing their opinions on the contentious question of "public aids" to transportation. The A. A. R. brief revealed that land grant deductions being made by the railroads in charges for their transportation service to the Federal government are now running in excess of 100 million dollars a year. The trucking association made the modest claim that users of the highways paid 2½ billion dollars more than their "fair share" of road costs in 1920-40.

●

NO SYNTHETIC MANPOWER: The normal source of rubber is blitzed, and we turn to a synthetic substitute. New facilities and substitutes largely alleviate our shortage of critical materials. But there is no such thing as synthetic labor. In the field of manpower, the only recourse is to make more economical use of a fixed supply. Thus Otto Beyer of ODT analyzes the situation in a primary national resource-shortage which is only beginning to pinch. His views of present and impending problems, with especial reference to m. of w. work, are given in an address, reported in a feature article in these pages. Captain Beyer suggests, among other expedients, the wider employment of women, removing unnecessary prohibitions on age and physical limitations, "upgrading," training programs, avoiding seasonal fluctuations in employment as much as possible.

●

SOCIALIST UTOPIA AHEAD?: Attention is drawn in an editorial herein to a recent booklet issued by the National Resources Planning Board which says we "must," after the war, engage in an enormous program of alleged "investments" in public enterprises of all sorts. The excuse is that these undertakings are not sufficiently profitable for private capital to embark upon them—the Board omitting to say that the cost of its socialist expenditures, laid in taxes on private business, is one of the principal reasons private capital finds so few opportunities to stir it into providing increased employment. Based on the truism that you can't beat something with nothing, the editorial concludes that business had better engage more actively in *its own* "post war planning"—lest the decision go to the socialists by default.

VICTORY
Is Our Business

TEAMWORK

"Tain't the guns n'r armament,
nor the army as a whole,
But th' everlastin' teamwork
of ev'ry bloomin' soul."
— *Kipling*

GENERAL MOTORS
LOCOMOTIVES

ELECTRO-MOTIVE DIVISION

GENERAL MOTORS CORPORATION LA GRANGE, ILLINOIS, U. S. A.

Efficiency FOR VICTORY

Railway Salaries and Wages

Changes that have occurred in railway salaries and wages within the last five years afford striking illustrations of the trend in this country toward equalization of incomes, which is accentuated by President Roosevelt's recent order establishing a war-time economic dictatorship—ostensibly intended only to prevent inflation—and by past and pending federal tax legislation. The President's order restricts salaries (with some exceptions) to a maximum of $25,000 a year, and virtually prohibits advances in salaries exceeding $5,000 a year excepting in cases of promotions. Also, existing and proposed federal laws, by taking only very small or no percentages of small incomes, larger percentages of medium incomes, and very large percentages of large incomes, add to the penalties for having attained more than average economic success.

In the five years from June, 1937, to June, 1942, railway employees received not only larger *percentage* increases in their pay than railway officers, but a *larger average increase in dollars per month.* The average monthly pay of all officers in June, 1937, was $481, and in June, 1942, was $515—an increase of 6 per cent, or $34 a month. The average monthly pay of all employees (excluding officers) increased from $140 to $186—almost 33 per cent, or $46 a month. And, of course, the officers meantime had, and will in future have, much more than employees deducted from their pay by increased income taxes.

There has been a lot of talk about how much the "fancy salaries" of officers cost in the railroad as well as other industries. In June, 1942, railway gross earnings were $624 million; operating expenses, $378 million; and the total payroll, $244 million. Salaries of executives, general officers and assistants averaged $644 a month, and totaled $3 million $900 thousand, or 3/5 of 1 per cent of gross earnings; 1 per cent of operating expenses, and 1.6 per cent of the total payroll. Salaries of division officers averaged $386 a month; and salaries of *all* officers—executives, general and divisional—totaled less than $6 million $600 thousand, or 1.1 per cent of gross earnings; 1.7 per cent of operating expenses; and 2.7 per cent of total payroll.

The five years' increase in pay of executives, general officers and assistants from June, 1937, to June, 1942, averaged $34 a month, or 6 per cent; the increase in pay of division officers also $34 a month, or 10 per cent. Every class of employees received a much larger *percentage* increase than either general or division officers; and only one class of employees failed to have a larger number of *dollars* added to their average monthly pay than did the officers.

The 31 per cent increase to employees in train and engine service averaged $59 a month; the 22 per cent increase to professional, clerical and general employees averaged $33 a month; the 31 per cent increase to transportation (other than train and engine) employees averaged $39 a month; the 33 per cent increase to maintenance of equipment and stores employees averaged $45 a month; and the 43.6 per cent increase to maintenance of way and structures employees averaged $41 a month.

Virtually all railway officers are promoted on merit from the ranks of employees; unequal pay always heretofore has been assumed in this country to be the natural and necessary incentive and reward of unequal ability and unequal work. What will be the effect on efficiency and progress in transportation and industry of the prevailing process of reducing inequalities in *pay,* although efficiency and progress will continue to require the same inequalities in *ability and work* that they always have?

Should Railroads Be Deemed "Civilian"?

Changes have recently been announced in the organization of the War Production Board which are indicative of the evolution through which it has been passing.

At the outset its function was primarily to convert large areas of American industry from the manufacture of peace-time products to the manufacture of the materiel of war. Haste was essential to the end that the output of ships, airplanes, tanks, cannon, rifles, ammunition and many products on the shelves of quartermaster stores be quickly multiplied. This job has been accomplished with amazing effectiveness.

As total industrial production has approached the limits of the nation's supply of basic materials, the major problem of WPB has switched from the stimulation of production to control of the flow of materials to industry so that the output, first, of component parts and, second, of the various end products themselves shall all be in balance.

Transportation is as crucial a war function as the manufacture of munitions. The utmost care must be exercised in estimating the minimum needs of the railroads—which circumstances have decreed shall provide an increasing part of the total intra-national transportation—and then nothing must interfere with the delivery of the materials required to meet these needs.

The railroads have been handicapped here in two ways. In the first place, when industries were classified as defense or civilian, the railroads were placed in the latter group, where they are but one of many competing for the limited supply of materials left over after the expanding needs of war industries have been satisfied. In the council which decides on the proportions in which the available materials are to be allocated, the one authoritative voice on which the railroads must depend for representation is equally responsible for the fate of all other civilian industries. If transportation has been regarded as anything more than another civilian industry in the formulation of these decisions, the record of performance certainly offers poor support of the fact.

In the second place, in the Transportation Equipment Branch, once the allocation has been established, both the builders of railway equipment and the railroads have been subjected to many delays in the release of material ostensibly made available by the allocations. Such delays seem to stem from too academic an approach to the processes of procuring and fabricating materials on schedules required to permit the orderly progress of production programs. These hindrances to orderly production are matters of serious concern.

Not only do the railroads need all the equipment and materials they will get, and more, but neither the equipment builders nor the railroads should be forced to waste productive man-hours and facilities at a time when both are among the most critical of the nation's resources.

The new emphasis on the scheduled flow of material implied in the reorganization of the WPB suggests the need of industry representatives in the Board's organization whose knowledge of the processes and needs within each industry are even more intimate than has been required in the past. Transportation cannot be blamed for hoping that its situation may be improved in this respect at least.

Tie Outlook Becomes More Serious

Among the numerous shortages in basic materials that are developing, none holds more serious possibilities for the railways than crossties. Anomalously, this situation is developing at the end of a season in which the railways have installed more ties than in any year for more than a decade. Furthermore, on most roads the requirements for 1943 are on hand, in large part at least. In general, the shortage will not be felt in full force until 1944.

With most materials a shortage so far in the future affords cause for little concern. With ties the situation is different. Failure to realize this fact by persons in positions of responsibility is giving rise to the danger referred to. This develops from the fact that it requires from 12 to 18 months to produce, season and treat a crosstie ready for insertion in the track. In other words, the ties that will be required for renewals in 1944 should now be coming from the woods.

The production of crossties is being curtailed seriously by a number of influences. Ties are made largely by woodsmen who hew them by hand. Many of these men are being drawn into our armed forces; others are being attracted into defense industries. As a result, there is an alarming dearth of woodsmen producing crossties.

And it is not possible to make good this shortage by resort to the small saw mills that normally produce a part of the ties, for the output of these mills is being taken for dimension lumber for war uses.

Of late, attempts to establish ceiling prices for ties have further discouraged production, because similar ceilings were not established on stumpage and on wages, the two major factors contributing to the cost of a crosstie. To add to the confusion, a tendency is developing in numerous areas for the railways to lower their standards for acceptance in an effort to secure a larger share of the ties that are available—a practice which increases in no way the number of ties produced but lowers the quality of the ties available for all users.

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Efficiency FOR VICTORY

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the fact that the crosstie provides the foundation for the track structure. The present record traffic is taking an increased toll of tie life, although not in the same direct ratio as with rails. It is vital to the security of railway transportation that the tracks be adequately tied if the track structure is not to be weakened and dependability of travel jeopardized. This situation is of such importance that it warrants co-operative consideration now by all parties concerned—the railways, the ODT, the OPA and others, to the end that an adequate supply of crossties of proper quality may be forthcoming in the months immediately ahead to avoid inadequate maintenance, and possible disaster, to the nation's life line of transportation in 1944. Unless these measures are taken now such dependability cannot be assured for, unlike rails and most other materials, there is no way to catch up later on time that is lost now in the production of crossties.

Bureaucrats Present A Blueprint for Utopia

Those who believe that management of private industry should postpone making plans to maintain employment, productivity and public confidence in the post-war period will find evidence bearing on their position in a pamphlet available at a price of 5 cents from the Superintendent of Documents. It is a product of the National Resources Planning Board, is entitled "Post-War Planning—Full Employment—Security—Building America," and is dated September, 1942.

Whatever question there may be of the propriety of devoting time and energy to post-war plans while the war is still in progress, this pamphlet shows the socialistic bureaucracy in Washington is intensively occupied in this activity. Private enterprise can therefore neglect similar effort with the knowledge that at the war's end it will face the electorate empty-handed in competition with an opposition fully prepared, even down to sales slogans, to make government control of the economy permanent.

The promises the National Resources Planning Board holds out for its program are not unduly modest. Full employment; the 40-hour week or less; no "sacrifice of wage standards;" "every human being within our boundaries" to have plenty of "food, shelter, clothing, medical care, education, work, rest, home life, opportunity to advance, adventure and the 'basic freedoms'" —such is the Utopia which an economically-sterile political bureaucracy is already telling bewildered Americans it is going to establish for them. When they talk that way while the war is still on, it is easy to imagine the exaggerated claims for their program which will blare out of every radio the minute military victory is in sight. If unopposed they will make the voter believe that to veto this program would be to reject Paradise.

The heart of the Board's program is a so-called "shelf" of public works (which is a "shelf" in the same sense that the Library of Congress is a bookcase). They are going to put millions to work by "investment" of the taxpayers' capital in projects "which do not offer a chance of profits large enough to attract private capital, or even 100 per cent return of investment." In other words, (1) they are going to discourage a revival of taxpaying private enterprise by competing against it with plant which does not pay taxes or have to earn any return; (2) to make people rich by giving them things they don't want enough to pay for voluntarily, thereby rendering difficult or impossible the production of economic goods that are wanted; and (3) with a war to pay for, make peacetime expenditures (and taxes) dwarf all previous experience. What this is, is the pre-war New Deal carried out in the post-war period on a wartime level of expense.

This is not all there is to it. There are going to be "handicrafts and hobbies, community enterprises, dancing, organized athletic events, etc.". In short, boondoggling. The pamphlet's 32 pages are full of such condescending "welfare" talk, like Lady Bountiful addressing immigrant mothers at a social settlement. We "must" do this and we "must" do that, they insist; as if the American people had *already* turned over the economy to them and they were issuing orders to us. They very well may be doing just that before long, if private business management doesn't quickly get over its inhibition against doing its own post-war planning.

A further and more comprehensive discussion of the problem which free enterprise faces in this connection will be found in an article elsewhere in this issue.

A Suggestion to Mr. Whitney

"We have to 'do without—' some of everything, and that includes travel. Mr. A. F. Whitney, president of the Brotherhood of Railroad Trainmen, calls for government nationalization of railroads as the way out. Florida's representatives in Washington demand special consideration for winter travel to that happy region's sunny shores. One can understand, perhaps, the latter phenomenon, for 'pressure-group' activity is still rife amongst us. As for Mr. Whitney's idea, all that can be said is that it sounds like a voice from the tomb where 'isms of bygone generations lie.

"With government in the person of the capable Mr. Eastman, head of the Office of Defense Transportation, already in complete command of the supply of transportation, and with railroad forces working in full cooperation with him, and, as he has pointed out time and again, with remarkable efficiency, it would seem that the railroads are doing their war job at least as well as any other industry in the country and probably better than many. Some one might remind Mr. Whitney that this is 1942, not 1918."

—From an Editorial in the Wall Street Journal

No. 113 Switches the Textile Machinery Siding—a 2.5 Per Cent Grade Off the Main Track

Switching at Small Industrial Centers on the B. & M.

Forty-four-ton Diesel-electrics meet the needs at eight points where service is light—Expense of operating small steam terminals eliminated

SEVEN 44-ton, 380-hp. Diesel-electric locomotives of the General Electric type introduced into the field in 1940* are now working in general switching and road-haul service on the Boston & Maine at Biddeford, Maine; Concord, N. H.; Woodsville, N. H.; Berlin, N. H.; Keene, N. H.; Northampton, Mass., and North Adams, Mass. An additional 44-ton locomotive has recently been placed in service at Holyoke, Mass.

The Maine Central also operates one of these locomotives at Eastport, Maine, the most easterly city in the United States. A second unit has just been placed in service at Augusta, Maine.

The Boston & Maine was among the first roads in the country to place General Electric 44-ton locomotives in service. They were selected to replace 0-6-0 steam switching locomotives and eliminate expensive steam terminal facilities for maintenance, water supply, coaling and ash handling. In addition, they have proved to be more economical, as well as cleaner and quieter in their operation.

These locomotives are provided with two 190-hp. moderate-speed, heavy-duty, four-cycle Diesel engines, each engine directly connected to a railway type generator. Each generator is connected to two permanently paralleled, axle-mounted motors. This provides a power plant on each end of the locomotive complete with its own battery charging and air supply, each capable of independent operation.

The four traction motors are mounted in two swivel trucks. The operating cab, engine hood and underframe, in addition to the trucks are of all-welded construction. The accompanying Table I shows the principal characteristics.

These locomotives are designed for general switching, branch-line road-haul service, and way-freight runs, for which their maximum speed of 35 m. p. h. is ample.

Load Meters on 44-Ton Locomotives

These 44-ton locomotives are equipped with load meters to indicate the limits of safe operation. These meters enable the engineman not only to prevent abuse of the locomotive but also to get the most work out of it within its safe limits.

The load meter has an indicating band on the dial which is divided into a long green section, followed by two short sections of yellow and red. As long as the operator keeps entirely in the green section, his locomotive is entirely safe from a motor loading standpoint. When operating in the yellow section, the engineman knows that he must limit his operation to a short period. This is followed by the red which tells him that he is

* For full description of the locomotive with performance curves, operating costs, etc., see article by P. M. Gillilan, Transportation Department, General Electric Company, Erie, Pa., in the *Railway Age* of November 23, 1940, page 784.

in the danger zone and should either take off some of the load or finish the movement as quickly as possible.

It has been found that these load meters are of great assistance to the engineman and help considerably to reduce maintenance of the locomotive.

At Northampton and Eastport

The unit stationed at Northampton, Mass., makes a round trip daily of 42 miles to South Deerfield in pick-up and way-freight service, in addition to switching the yard, sidings and house-tracks at both points.

The Diesel-electric on the Maine Central at Eastport makes two round trips daily—a total of six miles—to Ayers Junction in branch-line service between switching routines at both points. This locomotive is regularly fueled at a point along the route in the road-haul pick-up run by a truck. This contact point is previously arranged to meet the convenience of both the railroad and the supplier.

The Locomotive at Biddeford, Maine

The yard and industrial siding work at Biddeford-Saco, Maine, requires the operation of a single 44-ton locomotive. This unit has been working at this point since November, 1940, when it replaced an 0-6-0 type steam switching locomotive of the G-10 class.* The latter class weigh 127,800-lb. on drivers and have a rated tractive force of 22,720 lb.

This locomotive operates one eight-hour shift per day, six days a week, and as of June 30, 1942, had operated 4,508 hours and had been serviceable 98.1 per cent of this time.

Statistics on the operation of this locomotive for November, 1941, and for a year and 11 days following its installation, show that a 44-ton locomotive is a profitable unit for operation eight hours per day.

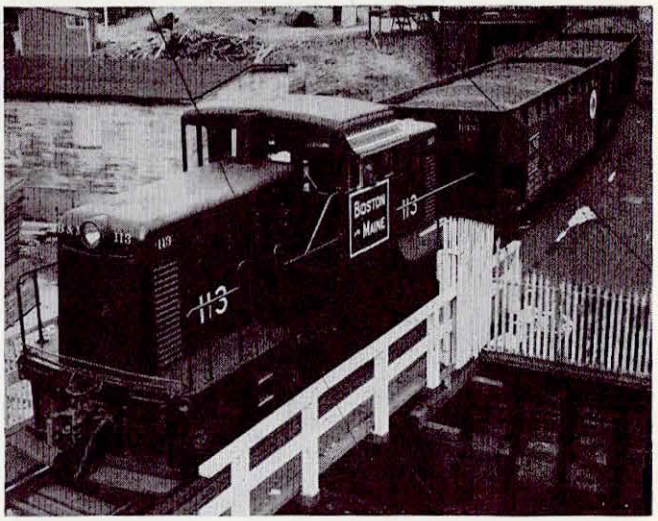
Principal Dimensions and Data for the 44-Ton Diesel-Electric Locomotives in Service on the B. & M.

Weight in working order, lb.	89,000
Weight per driving axle, lb.	22,250
Length inside knuckles, ft.-in.	33- 5
Width overall, ft.-in.	9- 6
Height overall, ft.-in.	13- 3⅛
Rigid wheelbase, ft.-in.	6-10
Wheel diameter, in.	34
Gear ratio	11¼ to 1
Tractive force, continuous, lb.	13,000
Speed continuous rating, m.p.h.	7.1
Maximum tractive force, 30 per cent adhesion, lb.	26,400
Maximum speed, m.p.h.	35

A maintenance employee regularly stationed at Dover, N. H., 32 miles distance, is detailed to spend eight hours each Sunday at Biddeford to render running repairs to the locomotive. The Boston & Maine estimates that, as compared with steam operation, this method of maintenance saves about $400 per annum, representing the cost of light engine mileage involved in periodical trips to Dover for engine-house work.

This Diesel-electric locomotive also eliminated the necessity for the employment of a watchman at Biddeford to coal the tender by hand-shoveling from a wall bin inside the single-stall engine shed and performing general hostler's duties. This saving is estimated at 39.7 cents per hour per eight-hour day. It also eliminated the problem of storing and handling coal required for a single steam locomotive which was not large enough to warrant the purchase of mechanized storage and coaling equipment.

The Diesel at Biddeford is fueled during the engine crew's lunch hour from a truck driven by a local oil dealer. This is a convenient period and otherwise saves loss of locomotive operating time. The railroad's contract calls for as much oil as is necessary for the operation of the locomotive with the prices adjusted monthly.



Light Trestles Don't Stop a 44-Tonner—No. 113 on the Diamond Match Coal Pocket at Biddeford

Locomotive No. 113 has the daily stint of switching industrial sidings, freight houses and local yard at Biddeford-Saco. It is operated by one man, since its maximum weight in working order of 89,000 lb. is under the limit set in the current labor agreements. A conductor and yard helper bring the total crew attached to the locomotive to three men.

Biddeford and Saco (combined population 24,825) are industrial and residential cities located south of Portland, near the mouth of the Saco River—Biddeford being south of the river, and Saco north. Both are served by two parallel main lines of the Boston & Maine between Portland and Boston, which meet to the south of the towns at AR tower and are about ⅓ mile apart through the cities themselves. The two-track "Western" route runs through the central portion of the cities and serves most of the industries.

On the western line, the 44-tonner works within the yard limits approximately 9,500-ft. apart. In Biddeford this territory includes a freight house (two tracks, capacity 20 cars); a local yard (two tracks on each side of the main, capacity 132 cars) and eight industries (including a fabric mill, textile machinery plant and match factory) served by twelve separate sidings. The most difficult siding to drill is that serving the machinery plant which runs off the main track on a grade of approximately 2.5 per cent. In Saco the territory includes a freight house, (with two tracks and a capacity of 22 cars) and seven separate spur tracks serving a nearby factory. The two freight houses are 2,400 ft. apart.

On the single-track "Eastern" route, this locomotive handles the Biddeford freight house (one track, capacity 20 cars); a general siding (capacity 23 cars), a parallel industrial siding serving a coal shed and a warehouse and one additional short plant spur in Saco. Since this locomotive must reach the eastern route sidings by the way of AR tower, the total territory in which it works each day is approximately 3½ miles long.

* This class of locomotive was built by the Manchester Locomotive Works between 1903 and 1910. The drivers are 52 in. in diameter; cylinder, 19 in. by 24 in.; steam pressure, 160 lb. per sq. in.

Railways and Post-War Planning*

Technological advancement may do more harm than good unless parallel economic enlightenment accompanies it

By Samuel O. Dunn

Editor, Railway Age; Chairman, Simmons-Boardman Publishing Corporation

WITHIN the last week we have seen one of the most significant events in the history of our country—establishment of an economic dictatorship. I do not question its necessity as a war measure to prevent inflation. But neither can I doubt that it indicates a trend when I consider two facts. One of these is that a previous attempt to establish virtually a government economic dictatorship was made in time of peace in 1933 by the legislation creating the National Recovery Administration and the Agricultural Adjustment Administration.

Purpose of the $25,000 Salary Limit

The other of the facts is, that in the order creating this wartime economic dictatorship, to alter what are called "gross inequities," it is decreed that, with certain exceptions, no salary shall be paid exceeding $25,000 a year after taxes. Plainly this limitation of salaries, causing drastic reductions in the income of all business leaders, has no place in an order intended solely to prevent inflation, will have but an infinitesimal, if any, effect toward that end, will not further the war effort, and can have only the purpose of promoting an equalitarian socialist (or communist) economy. It is a sop to placate organized labor, because of restrictions apparently being placed on further advances in much the highest wages in all history, and strikingly illustrates, as does so much that recently has occurred in Washington, that we are living under a socialist-labor government.

Make no mistake—it will require a desperate struggle to overthrow this socialist-labor economic dictatorship and restore private enterprise after the war; and meantime believers in private enterprise cannot devote too much study, thought and discussion to what private enterprise really is, and what should be done to correct its faults and give it a real post-war opportunity for revival and survival. And those of us who are associated with the great railroad industry have cause for profound gratification in the fact that thus far it has so met every war-time demand and test as to afford no aid or comfort to those enemies of all mankind, whether abroad or at home, who would permanently substitute the economic dictation of an omnipotent state for the voluntary enterprise and activity of free men.

The demands for service made upon our great railroad industry since the United States began its preparations for war twenty-eight months ago, and their remarkable performance in meeting these demands, suggest many interesting and fruitful comparisons, contrasts, comments and prognostications.

It is not necessary to tell any audience of intelligent persons that private enterprise fell into disrepute in this country during the Great Depression, and had been previously or was during the depression virtually or actually abolished in most other leading countries.

Private enterprise in railroading in this country was in such bad repute that many, including persons highly placed in business as well as government, criticized the present generation of railway managers as lacking foresight and competency. Railroad transportation was called "outmoded." The Interstate Commerce Commission adopted plans of reorganization of bankrupt railways based upon the assumption that the net earnings of the industry during the depression forecasted its future net earnings. "Institutional" holders of railway securities and their counsel, although professing support of private enterprise in general, accepted this assumption and have supported these plans of reorganization; and railway securities have been a drug on the market. There was widespread expectation that in the event of war private railway management would "break-down" and war-time or permanent government management would be adopted.

There was much advocacy before the war, and actual partial adoption, of a government "planned economy" for all industry, upon the theory that private enterprise had become unequal to providing as much employment, production and national income, and to distributing national income as beneficially for the masses, as a government "planned economy" could and would. And there is now much government planning of our post-war economy on the same theory that private enterprise can no longer be depended upon, and that after the war government will have to be relied upon to assure adequate employment, production and economic security.

Railroads Prove Social Value of Freedom

The performance of our railways during the last two years, it seems to me, affords at this very critical time the best vindication of private enterprise, and the best argument against government planning or management as a necessary solution of our country's economic problems, that has been afforded. For the achievement of our railways during this period has been the greatest of any industry in the world; it has been almost solely an achievement of private enterprise; and it has been accomplished in spite of numerous difficulties actually created by government planning. At the beginning of 1918, during World War I, government operation was adopted, and the two years' increase in 1918 over 1916 in freight service rendered was only 12 per cent and in passenger service only 23 per cent. How great the recent achievement of our railways has been is indicated by the simple facts that in June, 1942, they rendered 80 per cent more freight service and 106 per cent more passenger service to the government and people of the United States than in June, 1940, the month when our preparations for war

* Address before Western Conference of Railway Counsel, Chicago, October 6, 1942.

began; and that they rendered this vastly increased service satisfactorily and with but an almost negligible increase in their facilities.

I have said this achievement is due almost solely to private enterprise; but not merely to what private enterprise has done during the last two years. The true story begins almost a quarter of a century ago. With the experience of World War I fresh in their minds, the chief executives of the railways—representing only private enterprise, and inspired only by its spirit, and without any government prodding or planning—met early in 1923 and adopted a program for making railway transportation adequate to all future demands. That program consisted of two parts. The first was for expansion of railway facilities, for which purpose railway investment was increased more than four billion dollars during the next seven years. The second part was for increased efficiency in the use of equipment, to help accomplish which the Car Service Division of the American Railway Association was given real authority, and soon took the intiative in promoting organization of co-operating regional shippers' boards throughout the country.

Paradoxical as it may seem, the full importance and value of the program adopted in 1923 were never fully demonstrated until almost two decades later. There were two reasons. First, during the Twenties increased competition of other carriers diverted large amounts of traffic from the railways, and the railways' efficiency in handling traffic during this period was attributed largely to the fact that they had a smaller share of the total traffic to handle. Second, during the Thirties the depression so reduced production and traffic that the railways had a large surplus of facilities. It has been only within the last two years, during which our war effort has created such a huge demand for increased production, that there has been opportunity to measure by actual results how much the ability of our railways to serve the public has been augmented by the program of improvements in plant and methods begun almost twenty years ago; and to date the results of the most crucial test of actual experience conceivable have equally gratified the defenders and confounded the critics of private enterprise.

Co-operation—Not Regimentation

For let me emphasize again that it is *private enterprise* that has done the job. Private enterprise furnished the capital. Private enterprise invested the capital in accordance with plans made by private enterprise. Private enterprise improved the operating methods of individual railways. Private enterprise affected the better co-operation between the railways as a whole. Private enterprise on the railways sought the better co-operation of shippers in improving the utilization of freight cars. And the private enterprise of shippers responded by giving, in the interest of shippers, railways and public, the required co-operation.

I accord full credit to Director of Defense Transportation Eastman and his staff for needed and constructive help given in 1942; but Mr. Eastman, while he represents the government, has been among the most outspoken in praising what has been accomplished without government direction and help, and in warning against government restriction of materials for railway use that may nullify railway and shipper co-operative private enterprise in future.

And so in 1942, after all the restrictive government regulation, government-aided competition, government-compelled advances in wages, increases of taxes and government denial of needed equipment and materials to which the railways have been subjected; after all the years of criticism their managements were given for sins of omission and commission; after all the talk about them being "outmoded"; after all the belittling of their earning capacity by the Interstate Commerce Commission and "institutional" investors—we see them this year not only handling satisfactorily an unprecedented freight and passenger traffic, but also earning the largest net operating income in their history excepting in 1929. Revenue both per ton-mile and passenger-mile is lower than in 1929; but in the first half of this year gross earnings were $200 million larger than in the first half of 1929. Although wages are 31 per cent higher than in 1929, the ratio of operating expenses to gross earnings was only 68.3 per cent, as compared with 75 per cent in 1929, and was, in fact, the lowest since 1916. Although estimated taxes were 150 per cent, or $291 million, more than in 1929—their increase largely exceeding the increase in gross earnings—net operating income of $552 million was only $11 million less than in 1929.

Private Enterprise—A Demonstration

The vindication of private enterprise in railroading has been so complete that not even the most radical and starry-eyed government planner dares raise his voice for government railway operation now or in future, and that it affords perhaps the most potent of all arguments that are now or will be in future available against a government planned economy and for opportunity for a full revival of private enterprise in this country after the war.

But will such an opportunity for revival of private enterprise in our post-war economy be afforded? That will depend not only on the promoters of a government planned economy, but also, and perhaps even more, on the advocates, and especially on the managers, of private enterprise.

The railways have two major concerns about the post-war economy. One is in regard to how traffic will be divided between them and other carriers; and this is likely to be given major attention by them. The other is in regard to how much total traffic there will be to divide, and is more important. Loss of traffic to competitors did the railways great harm in the Twenties and Thirties; but nowhere near as much harm as the decline of national production caused by the depression, and the consequent decline of total traffic. If total production and traffic had increased normally during the Thirties, and the railways had got only the same percentage of the *increased* total traffic that they actually got of the *reduced* total traffic, the railroad industry would have had relatively about as good earnings, afforded as much employment and made as large purchases from other industries in the Thirties as it did in the Twenties. Experience during the last two years has most strikingly demonstrated how much of both carrying and earning capacity the industry had latent during the Thirties.

Foresight Should Center on Production

The vitally important question for the railroads, as well as all other industries and all the people, then, is how the post-war economy should be and will be planned and developed to make it produce the most possible. Paradoxical as it seems, this most important of all post-war economic questions—if current public discussion is a reliable sign—is being given very little study by industry. There is much talking and writing about advances in technology that have provided or will provide vastly increased *potential* productive capacity. But the

last two years' experience has conclusively demonstrated that we had during the Thirties the *technological* means of unprecedented production; and yet we never produced as much per capita in any year of the Thirties as we did in 1929. There is also much talking and writing which advocate or forecast more *economic democracy* after the war—i. e., less inequality in incomes, and consequently higher standards of living for the masses; but they include little or nothing about *whether* and *how* there is to be achieved in *peace-time* enough national production to provide these higher standards of living and this security. Those who thus write and talk usually assume that economic democracy will consist of less unequal incomes attained by diverting part of more-than-average incomes to less-than-average incomes. But the part of *total* national income consisting of larger-than-average incomes never yet was big enough in peacetime substantially to increase less-than-average incomes even if all incomes had been equalized.

A Larger National Income Is Needed

We had our largest completely peacetime national income per capita in 1929; and it averaged only $1,740 per person gainfully employed, including everybody from multi-millionaires down to the most "underprivileged." The average pay of all railway employees in 1929 was $1,744; and it is now about $2,300. It would require a peacetime total national income of $128 billion, or 54 per cent greater than that of 1929, to provide an *average annual* income of $2,300 for all persons now gainfully employed in this country; but experience this year is demonstrating that, in spite of all the investment and technological progress that have been made, we have not at present enough agricultural and industrial capacity to produce, at current prices, an annual national income of over $115 billion, or an average of $2,000 for all persons now gainfully employed; and yet we see railway employees, who already are receiving an average of $2,300, seeking large further advances.

Plainly, the problem of largely increasing less-than-average incomes, and maintaining them after the war, is mainly one, not of equalizing incomes, but of greatly increasing our peacetime total national employment, production and income. How, then, can this be accomplished—if at all? On that question we have three schools of economic thought. On one extreme we have the advocates of "government planning" who contend it can be accomplished only by centralized government control and direction of the entire economy—by a huge government investment in public works and in means of production and distribution competitive with private enterprise, and by government dictation to or subsidization of industry representing private investment in order to compel it to do its stuff in the public interest.

On the other extreme, we have many leaders and spokesmen of private business who evidently believe, even if they don't say it, that the entire economy—excepting transportation agencies and public utilities now subjected to regulation—should not only be run by private enterprise, but by a private enterprise that should be allowed to employ virtually any and all monopoly practices that it may consider to its interest. Finally, between these extremists of the left and the right, we have those old-fashioned liberals who oppose a government "planned economy" and favor private enterprise—but a private enterprise subject to strict government regulation of natural monopolies and to equally strict government enforcement of competition within naturally competitive industries.

I unhesitatingly and unreservedly align myself with these old-fashioned liberals—of whom I regretfully fear there remain all too few. And in my opinion business in this country after the war—if it has any choice in the matter—will have to choose between a virtually government-managed economy and a private enterprise economy in which competition within naturally competitive industries will be enforced by government as it has not been for years. And, frankly, I hope this will be the case, because I believe the *only* salvation for private enterprise after the war will be the restoration of competition in it, which was greatly reduced in the Twenties, and seems to have been further reduced since; with government sanction, it was temporarily almost abolished in numerous industries under N. R. A.

In order to be saved, private enterprise must continuously provide employment for all who are employable and a constantly-increasing peacetime production greatly exceeding any past peacetime production; and it must recognize the fundamental fact that how to do these things is even more an *economic* than a *technological* problem; and that progress in *technology* actually makes economic and political problems more difficult, and, therefore, more dangerous to private enterprise, unless accompanied by *economic* progress resulting in correspondingly increased employment, production and national income. And *only competition*—in prices and otherwise—can cause *economic* progress to equal *technological* progress under private enterprise, and thereby make private enterprise demonstrably of such value to all the people as to enable it to withstand all attacks upon it.

The success of war economies in our own and other countries in providing employment and production is cited as evidence of what a peacetime economy should accomplish. But the important cause of this success of war economies is that government purchases for war provide a huge market. Provide a peacetime economy with an equal market, and it will provide equal employment and production.

How to Secure a Large Peace-Time Market

But how provide an equal peacetime market? Government planners, seeing this is the real problem, plan for huge government peacetime expenditures. Do business planners see with equal clarity that the real post-war problem will be one of markets? And are business planners squarely facing what private enterprise must do to develop large enough markets to prove lack of necessity for vast competing government enterprise?

The question of markets inevitably raises the question of prices and rates. For markets are places where commodities and services are *traded*. Upon the relations between their prices and rates depends the volume of them traded, and, therefore, the size of markets. And the size of markets determines the possible volume of production, transportation and employment.

For industry cannot long produce what it cannot sell; and selling in the economy as a whole is simply *trading* each service or commodity for every other service and commodity. And when a private enterprise economy becomes unable to sell—i. e., trade—all it can produce, the main cause always is maladjustment of prices rendering it impossible for some industries, because their prices are relatively too low, to buy all that can be produced by other industries because their prices are relatively too high—resulting in depression in all.

But how balance prices if in some industries they are fixed by competition and in others by monopolistic practices? How balance them if in some industries wages —or incomes—are low and fluctuating and in others are high and rigid? How balance them if some industries are government-subsidized, while others are not?

Competition Must Be Restored

Private enterprise can function successfully only with strict and fair government regulation of natural monopolies; free competition—in prices as well as otherwise—within naturally competitive industries; no subsidies to any industry; and wages adjusted in accordance with rates and prices.

Business ignores these plain economic facts when it uses monopolistic practices to control prices. For always then some prices are more effectively controlled than others, and resulting maladjustments in them prevent maximum practicable trade, markets, production, and employment.

Are those advocating restoration of free private enterprise prepared to face the economic music, and give rein to the free competition in prices as well as otherwise, that is the essence of free private entrprise? They may well consider one important contrast between what occurred following 1920 and 1929. Federal government expenditures were reduced $16 billion annually between 1919 and 1922; prices of commodities declined 37 per cent in 1921; and yet business immediately improved, and recovery was soon complete. Although business declined as much in 1930 as in 1921, prices declined only 9 per cent in 1930; had declined only 24 per cent in 1931, and 32 per cent in 1932; not until toward the end of 1932 did business begin recovering; and, after (in 1933) government and industry began artificially bolstering up prices, recovery stopped for two years, never to be completed.

Much business still shows, as it has for years, that it wants to eat its cake and keep it—to practice monopoly when it believes it will gain thereby, but also to keep private enterprise, the essence and essential driving force of which is competition within naturally competitive industries. It resorts to "reciprocal buying," which tends to promote monopoly and hinder technological progress because giving to big companies a big advantage that is unrelated to the quality and value of their products or service. It resorts increasingly to private transportation by water and highway, and seeks and secures government subsidization of it, which tends toward monopoly because only companies already big can engage extensively in private transportation. It strives to restrict competition by concerted action of existing companies to exclude new companies; by agreements regarding prices; and so on ad infinitum.

When the Great Depression struck, the leadership of private enterprise had no program or policies to offer excepting such as would deepen and protract it. I have been credibly informed repeatedly that the original plan of N. R. A. was taken to the White House by the then president of the United States Chamber of Commerce. Being a program for cartelizing industry, advancing wages and reducing working hours, N. R. A. was perfectly adapted to protracting the depression—which it did; and yet at first it was widely supported by business leaders who later as widely condemned it.

Will business leadership be caught equally unprepared after the war? It will be if it again (a) fails to inform itself regarding what is necessary to make private enterprise work, (b) fails to help reform abuses in private enterprise that hinder it from working, and (c) fails to educate public opinion in behalf of a reformed private enterprise that will work.

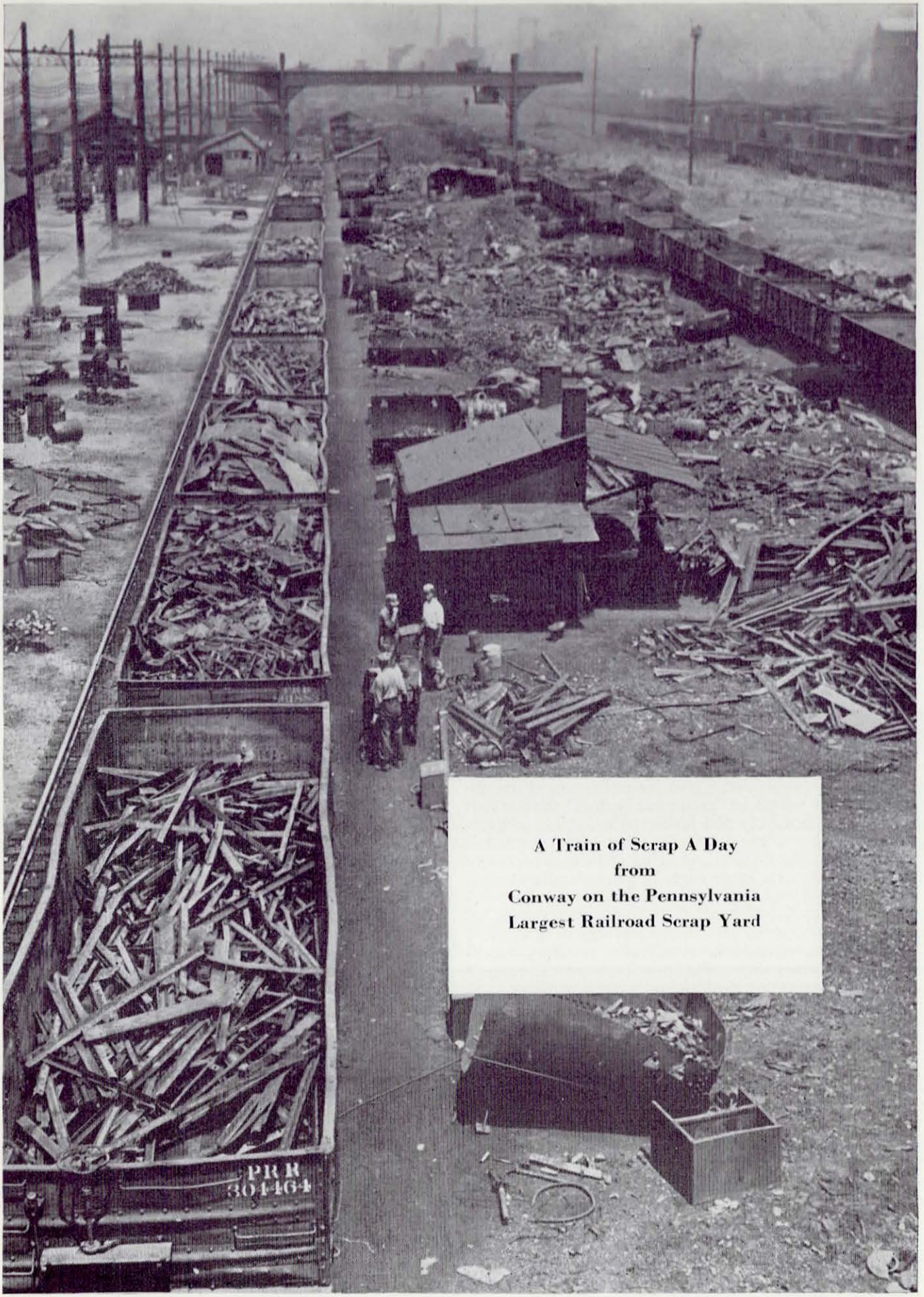
How about labor monopoly and wages? Plainly a monopoly economy as to wages is incompatible with a competitive economy as to prices. But business more than labor is on the spot; it is business that is now in competition with government in planning; and unless business voluntarily plans, and promotes and fights all along the line for a really sound and saleable private enterprise post-war economy that will provide ample employment and production, it will have forced upon it a largely or entirely socialistic post-war economy. The trend toward government-managed and collectivist economies prevails throughout the world; it has prevailed in this country during the depression and the present war; it will have powerful support in this country after the war; and it can be turned back here—if at all—only by a private enterprise economy free from dictation by private monopolies as well as by government.

The importance of our prospective post-war economy to the railways is obvious. There has been demonstrated during the last two years an imperative national need for maintaining and increasing their present demonstrated capacity. How could we have carried on our present great war effort if they had not had that capacity? Obviously, it would have been impossible. How could we feel safe in future in such a combative world if we should not maintain and increase the capacity of our railways? But to maintain and increase their capacity either they must be subsidized by government, or have enough traffic and net earnings to provide enough capacity without subsidies. For them to have enough traffic and net earnings is plainly preferable from every standpoint, but will require economically sound division of traffic between them and competing carriers, and an unprecedentedly large and increasing peace-time production by the nation's agriculture and industry.

The Only Choice: Competition or Tyranny

To this latter end our domestic commerce and our trade with other nations must be raised to levels never yet approached in time of peace. This cannot be accomplished under either a regime of protective tariffs restricting international trade and of private monopolies, or a regime of government "planned economies," which restrictive tariffs and private monopolies directly and strongly promote. They have had such "planned economies" in Russia, Germany, Japan and Italy since the last war; and they destroyed international trade, while proving incapable of providing adequate employment and production at home excepting by making the governments running them huge markets for things produced to carry on the campaigns of wholesale murder called "war."

The economic history of the world unmistakably teaches all who read it with unprejudiced minds that only free, *competitive* private enterprise can in peacetime provide in any country or in the world full employment and constantly increasing production. Those who, for their own selfish reasons, adopt policies preventing the free operation of private enterprise are economic enemies of everybody; but this is as true of those who determine policies of private business as it is of those who determine policies of government; and business leaders who do not see this are just as blind leaders of the blind as any labor union leaders, politicians and government bureaucrats, and will be just as much responsible for the downfall of private enterprise if that catastrophe for all of us occurs.



A Train of Scrap A Day
from
Conway on the Pennsylvania
Largest Railroad Scrap Yard

Scrap—2 Million Tons in 7 Months

More metal from railroads than in 1940 indicated—Less than in 1941—Widespread effort to increase shipments

RAILROADS produced about 13 per cent less iron and steel scrap in the first seven months of this year than in the same period of 1941, but their production was only 5 per cent less in July than in July, 1941; it totaled 3 per cent more during the first seven months of this year than in the same seven months of 1940, and 15 per cent more in July of this year than in July, 1940.

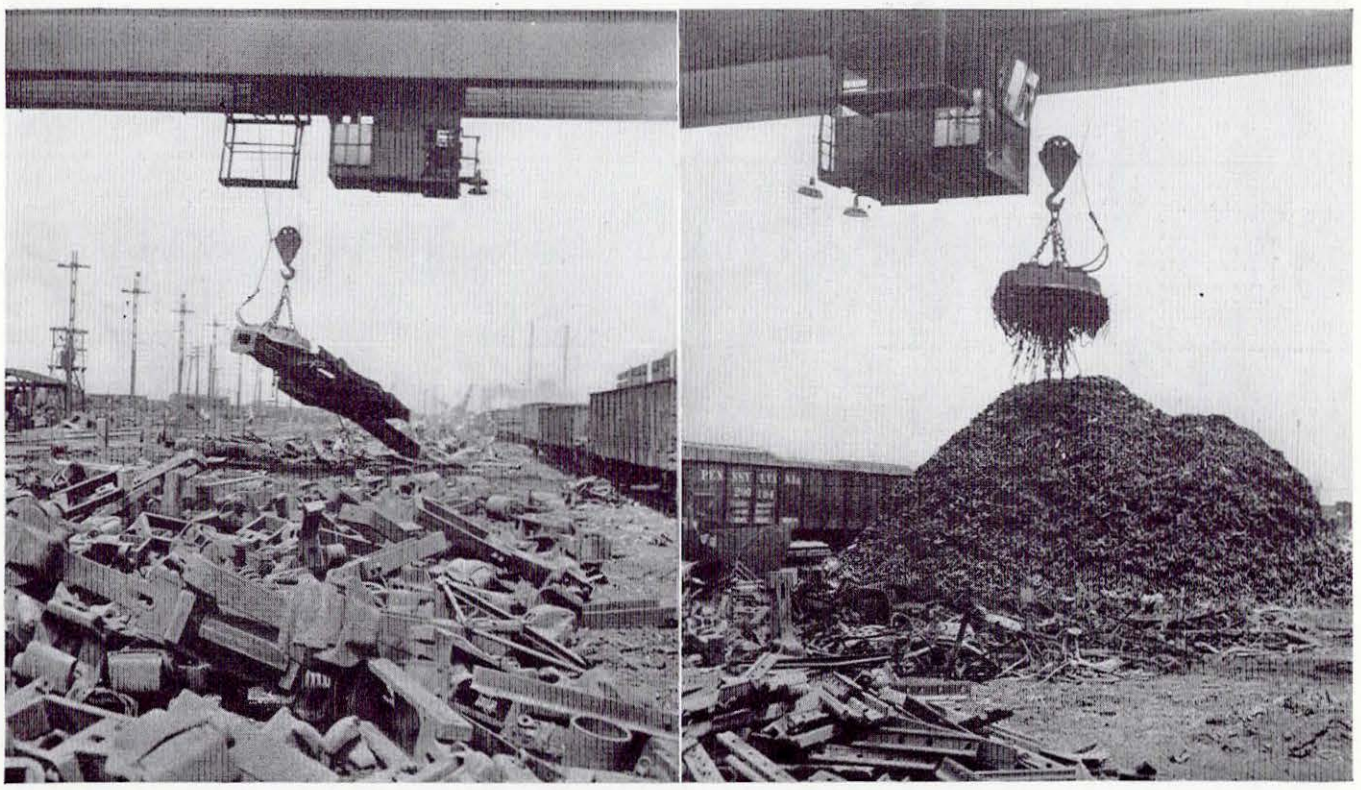
Sales in July, as determined from reports available at this time, amounted to $5,402,000, representing roughly 300,000 gross tons of iron and steel scrap, which brought the sales for the first seven months to approximately $34,550,000, or about 2,000,000 gross tons. These figures accept sales as indicating shipments and use the dollars collected as a basis for figuring the tonnage, an assumption which is faulty in several respects (as where sales precede shipments by 60 days) but is reasonably reliable for the period in question, and has the merit of meeting an increasing demand for indicators of the extent to which railroads are contributing to the Nation's scrap supply. Statistics on actual shipments in recent months are lacking, except as to relay rail, which is not included in these figures.

Less Scrap from Equipment

Although less scrap is being produced by the railroads in relation to the previous production than might be expected as a result of the greater prominence which is being given this year to scrap in the war effort, the figures reflect a larger rate of scrap production in the aggregate than the tonnages recently offered for sale by leading carriers which indicated that the railroads would produce only about half as much scrap this year as in 1941.

Railroads, it is pointed out, have always been scrap conscious, and have well-developed scrap organizations, which have kept the properties free of scrap so that no unusual accumulations were available at the beginning of the year from which to swell the year's output. The railroads are also retiring fewer locomotives and cars and are increasing their reclamation of materials because of the increases in their traffic and the difficulties of obtaining adequate quantities of new materials. Moreover, quantities of rail and other track materials, which are normally sold as scrap, are now held out of scrap for relaying. Extraordinarily large amounts of lightweight scrap are therefore required to offset the reductions in tonnage of these classes of scrap which were produced during each of the last five years.

Furthermore, the figures for the first seven months of 1942 do not reflect the full effect of the drives for scrap which are now in progress on many railroads. It was not until April 22 that railroads were required to exchange old rail for new rail, and not until July that nation-wide conferences were held with railroads to



Under the Cranes at Conway, Pa., Where 18,000 to 20,000 Tons of Scrap are Prepared for Shipment to Steel Mills Each Month

stimulate scrap drives; while War Materials, Inc., the agency created to finance the wrecking of buildings to produce additional scrap, was not organized until September. Later reports may, therefore, show some increase in the tonnage shipped by the railroads. This is indicated by the July totals which show a decline of only 5 per cent from July, 1941, as compared to the seven months total which reflected a decline of 13 per cent. At the same time, the current figures indicate the seriousness of the scrap situation, for the railroads supplied about 4,000,000 gross tons of scrap in 1941, representing 15 per cent of all the commercial scrap and 7 per cent of all the scrap consumed in 1941, and this year's steel production requires more scrap than the year previous to assure uninterrupted operation of all furnaces.

Scrap Sold by Railroads*

Road	7 Mo. 1942 Value	Inc. over 7 Mo. 1941 %	Inc. over 7 Mo. 1940 %	July 1942 Value	Inc. over July 1941 %
Alton	$ 198,392	98	130	$35,405	120
Alton & Sou.	5,054	−19	−48	180	−76
Ann Arbor	5,979	4	−19	285	−56
A. B. & C.†	27,063	80	70	None	..
A. C. L.	13,758	−44	4T▲	4,648	6
B. & O.†	856,575	− 1	25	126,055	−18
Bang. & Aroo.	96,665	50	60	30,534	19
Bing. & Gar.	3,701	80	40	653	88
B. & M.	488,072	9	24	76,451	−22
Bur.-R. I.†	29	..	..	None	..
Cam. & Ind.	6,027	5T▲	..	None	..
C. of Ga.	156,875	−11	7	22,929	−20
C. of N. J.	277,050	−34	8	34,284	7
Cent. Vt.	33,667	−13	1	12,963	− 3
Char. & W. Car.	130	−47	−82	None	..
C. & O.	.....	..	..	68,680	..
C. & E. I.	127,384	12	12	25,020	29
C. & I. M.	23,755	2T▲	60	7,605	18T▲
Chi. & W. Ind.†	47,616	−14	140	6,853	−46
C. B. & Q.	107,515	− 9	60	15,826	− 7
C. I. & L.	42,764	−34	−43	3,424	−72
C. R. I. & P.†	787,297	1	5	119,962	20
Clinch	61,707	6	50	13,071	−55
Colo. & Sou.	79,462	−34	18	8,434	−71
C. & G.	6,826	−63	110	1,020	8
D. & H.	1,092	−15	46	28	−89
D. L. & W.†	276,041	−14	−36	43,057	−10
D. & R. G. W.†	207,209	15	24	27,418	−40
Det. & Mack.	1,497	..	..	None	..
D. & T. S. L.	3,704	68	68	11	..
D. T. & I.	16,932	..	..	2,493	..
D. M. & I. R.	90,182	− 2	44	11,944	−21
E. J. & E.	221,767	..	..	49,142	..
F. E. C.	68,496	130	3T▲	388	−67
Ft. W. & D. C.	52,168	−22	−22	7,224	20
G. N.	888,932	14	40	120,682	− 7
G. M. & O.	255,775	2	3T▲	28,000	−59
I. C.	1,487,806	− 2	7	251,348	8
Ill. Term.	25,305	15	4T▲	1,943	58
K. C. Term.	18,532	46	2T▲	5,244	9T▲
L. S. & Ish.	8,237	−65	2T▲	876	−87
L. & Hud. R.	7,460	−53	−12	1,110	−72
L. & N. E.	29,454	−55	3T▲	1,448	−96
L. & A.	39,601	−76	8	7,839	−37
L. & N.	467,907	−48	−37	60,184	62
Me. Cent.	104,183	73	− 1	23,252	99
M. & St. L.†	43,331	−23	−11	None	..
Miss. Cent.	3,638	130	2T▲	226	−70
Mo. & Ark.	1,702	−37	−42	None	..
M. P.†	874,373	− 4	7	137,435	−13
Monong.	10,183	28	100	1,294	−66
Montour	3,845	3	−48	None	..
N. C. & St. L.	59,764	−72	−45	10,845	−27
Nev. Nor.†	2,910	45	80	690	−14
N. Y. C.	5,396,436	..	..	753,186	..
N. Y. C. & St. L.	.....	..	..	24,777	..
N. Y. N. H. & H.	758,264	2	4	132,303	17
N. Y. O. & W.	59,662	10	64	9,742	−52
N. P.	704,938	− 5	−12	105,542	4
Peoria & Pekin	7,556	..	−27	None	..
Pere Marq.	.....	..	..	42,321	..
Pitts. & Shaw.	3,171	−50	−42	None	..
Pitts. Sh. & Nor.	5,134	..	..	None	..
Reading	316,713	−42	−32	48,976	−47
R. F. & P.#	5,424	..	..	695	..
Rutland	10,839	− 3	−30	None	..
St. L.-S. F.	432,110	1	40	51,047	−19
St. L. S. W.	228,987	− 5	4	30,705	33
Southern	854,219	−42	−35	256,680	− 2
S. P. & S.	47,443	−47	−46	11,834	−11
Tenn. Cent.	14,585	−45	14	2,164	−72
Term. of St. L.	38,448	100	54	4,398	−30
T. & N. O.	316,636	80	120	33,628	7
U. P.†	677,118	−15	72	16,183	−91
Utah	1,011	..	..	None	..
Virginian	207,016	26	31	64,649	2T▲
Wabash	89,726	−11	−18	9,343	−23
W. Md.	92,187	−30	−40	14,929	−18
W. & L. E.	149,360	−32	20	33,103	−21

*As reported to *Railway Age*—includes wheels and relayer rail from some roads.
▲Times.
†Six Months and June.
#Tons.

Meanwhile, the figures disclose many large increases in railway output. During the first seven months of 1942, scrap sales were 50 per cent larger on the Bangor & Aroostook than in the same period of 1941; while they increased 15 per cent on the Denver & Rio Grande Western, 130 per cent on the Florida East Coast, 73 per cent on the Maine Central and 100 per cent on the Terminal of St. Louis. These increases offset, in part, large reductions in the scrap output of other roads during the same period.

Pennsylvania and New York Central

The Pennsylvania is producing from 25,000 to 35,000 tons of iron and steel scrap each month this year, of which 18,000 to 20,000 tons are shipped to steel mills from Conway, Pa., near Pittsburgh, where the railroad operates the largest yard in the country for sorting and preparing railroad scrap. This yard, which has craneways half a mile long and employs 380 men in scrap handling and reclamation, is receiving from 35 to 40 cars of scrap daily, and is shipping an average of 30 carloads of scrap every 24 hours. From 3,000 to 4,000 tons of metal are also recovered from the scrap and reclaimed each month at this point.

On the New York Central, 180,000 gross tons of scrap, mostly iron and steel, have been produced so far this year, excluding 25,000 tons of used rail for yard tracks at military camps and war industry plants. The railroad also collected 287,000 lb. of scrap rubber, aluminum, brass, lead, copper, nickel alloy and manganese, together with 34,450 lb. of rope and 49,900 lb. of bags and burlap. At present, it is dismantling 46 miles of abandoned lines, tracks and structures containing 6,994 tons of metal scrap and relayer rail.

On the Chicago & North Western, over 486,000 net tons of metals were collected as a result of a three-year scrap campaign which was started at the outbreak of the war and is continuing. This tonnage included 9,749,208 lin. ft., or 116,943 net tons, of second hand and scrap rail, 111,750 net tons of scrap from retired locomotives and cars and 257,343 net tons of miscellaneous metal scrap.

Erie Active

Since Pearl Harbor, the Erie has stepped up the collections of vital military scrap metal from 1,900 tons a month to 2,288 tons, enough to supply a large open hearth furnace 19 full days each month. Every non-reclaimable piece of metal, from pilots of condemned locomotives to the coupling pins of cabooses and to worn-out bridges, rails and tens of thousands of rusty bolts, broken shovels and picks, is being added to the scrap pile. The present scrap campaign is uncovering tons of old fence wire and band iron. Units of equipment, long discontinued, and old tracks are brought in. Approximately 35,000 lb. of truck tires, which were in use as fenders on the bows of floats and other marine equipment in New York harbor, have been replaced by wood.

Other Roads on the Job

Other railroads are playing equally important roles in the drives for more scrap. During the first six months of this year, the Missouri Pacific released over 32,000 tons of scrap metal, enough for a full-size battleship.

The Southern Pacific Lines sold 130,000 tons in 1941, and accounted for 41,230 tons of the scrap produced during the first six months of this year. Continuing its drive for scrap, the Illinois Central is removing 13 miles of guard rails from bridges, aggregating 675 tons, which have been found unnecessary to the safe operation of trains.

Within 72 hours after a state-wide salvage contest officially opened in Nebraska, the Chicago, Burlington & Quincy loaded 8,500 tons of scrap into cars at its Havelock, Neb., shop and yards for shipment to the system reclamation plant or to consumers. Nearly 4,000 tons of scrap metal have been collected on the Nashville, Chattanooga & St. Louis and shipped to steel mills during the past three months.

In Canada

In Canada, the Canadian National Railways has collected more than 285,000 tons of scrap in 17 months. This included 197,935 tons of iron and steel scrap, 887 tons of scrap paper and 94 tons of scrap rubber. In addition, the road used 855 tons of brass and 3,413 tons of iron and steel in its own foundries, and shipped 6,224 tons of scrap brass and 76,631 tons of scrap wheels to mills in exchange for other material.

Approximately 250,000 tons of iron and steel in the form of rails, bridges and other equipment have been produced up to the present as a result of scrapping nonessential railway lines, the War Production Board announced on September 30.

The War Production Board announced on October 3 that there is not much more than a two weeks supply of scrap on hand to keep the steel mills on a full-time war footing and stockpiles lack 5,000,000 tons of scrap for capacity production. Steel mills report that the output of steel will fall as much as 10 per cent below capacity unless stockpiles of scrap are built up for the winter months.

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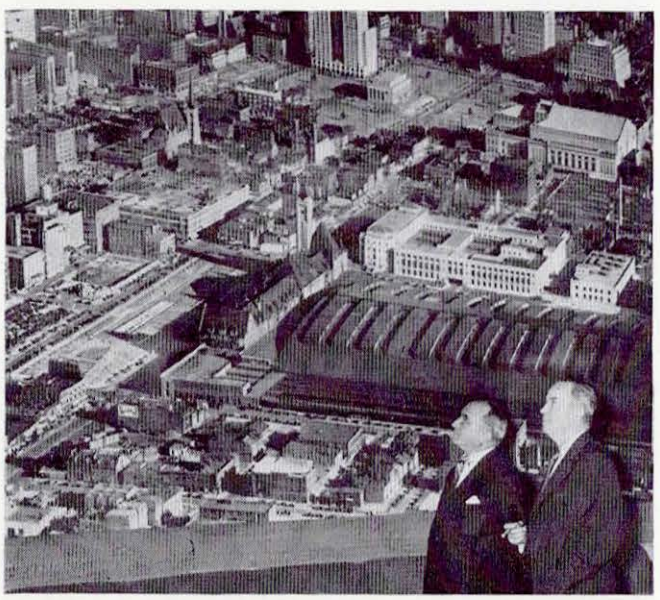

New U. S. O. Lounge in St. Louis Union Station

P. J. Watson, Jr., president of the Terminal Railroad Association of St. Louis, (right) and Rosco C. Hobbs, president of the Hobbs-Western Company, St. Louis, view a huge photo mural of downtown St. Louis, a feature of the decoration of the United Service Organization's new reception lounge on the second floor of the St. Louis Union Station. These facilities are the joint gift of the Terminal Railroad and a committee of 100 leading business men of St. Louis, headed by Mr. Hobbs. The lounge was opened on September 12, the dedication being attended by a large number of railway officers and prominent Army officers.

War an Incentive to Accounting Economies

By L. V. Porter*

DURING World War I, railroad accounting work was seriously handicapped by the loss of experienced freight station personnel, which occasioned considerable confusion and delay, as well as inconvenience to both patrons and carriers. Before the close of World War I, however, the situation in the stations had induced investigation and studies to relieve the station freight agent of accounting work and to confine his duties to selling transportation service. The exigencies of the present crisis are a spur to further exploration of possible accounting economies.

The original program was inaugurated by the New York Central at New York in 1920, when the accounting at a number of stations was transferred to a central office, identified as a "district station accounting bureau." Briefly, the freight agent forwarded to the bureau daily the original waybills received and copies of waybills issued—as well as copies of all bills issued for switching and accessorial charges. From these, the basic accounting reports required by interested auditors and the bureau were prepared. The freight agents also furnished the bureau daily a detailed cash sheet of collections and disbursements, together with a cash summary giving amount of the remittance, the collections, disbursements, other credit and debit papers taken into account, and the cash balance, from which the bureau records were posted and adjusted. Cash discrepancies, corrections, and auditors' changes were immediately acted upon and taken into account. At the close of the month, the bureau prepared a consolidated balance sheet for all stations reporting to it.

The results were so gratifying that additional district station accounting bureaus were instituted. As the system of bureau accounting was extended, more intensive research was conducted to improve procedures, which resulted in the installation of many simplified and economical practices, to the mutual benefit of all departments of the carrier and its patrons.

Today, the New York Central has ten district station accounting bureaus—located at New York, Weehawken, Utica, Buffalo, Cleveland, Chicago, Detroit, Cincinnati, East St. Louis and Boston. Every freight and ticket office on the New York Central reports to a district station accounting bureau.

Each bureau has trained units for revising received waybills before preparing and forwarding reports to the auditor of freight accounts. The received waybills for 26 major stations are revised before preparation of freight bills. All other bills issued by freight agents—such as local and interline switching and for tariff accessorial charges—are revised before reporting, as well as corrections, overcharge claims, etc. Revision by the bureaus is final, no further revision being made by the auditor of freight accounts.

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(*Continued on page 570*)

* Vice-president and comptroller, New York Central System.

In Spite of All of the Developments in Work Equipment, Maintenance Operations Call for a Large Amount of Manpower

Where Can We Get Manpower?*

War is making inroads on maintenance labor—Critical shortages in sight with limited reservoir to draw from

By Otto S. Beyer

Director, Division of Transport Personnel, O. D. T.

SINCE Pearl Harbor, our national economy has undergone drastic changes. This has come about in part because the fortunes of war have deprived us of raw material resources, such as rubber. In the main, however, it has changed because of the very nature of total war. In the past, we worried about increasing the demand for goods and services. At times we seemed to be embarrassed by an overabundance of things offered for sale. Now we have an exactly opposite situation in which the demand is apparently insatiable for no matter how much we labor to increase the supply, the demands of war are never satisfied.

It is unnecessary to stress this development since we all are well aware of the inroads which war has made upon our normal affairs. Everyday experience shows that shortages are becoming more and more common. In many respects, however, manpower shortage is the most striking development that the war has brought. Only a short time ago, our greatest problem was an over-supply of labor. If we look back over the whole decade of the nineteen-thirties, we see that as a people we were constantly preoccupied with the subject of unemployment. It was widely believed then that if we could overcome that difficulty our other domestic problems would be solved.

As a matter of fact, we have only just begun to feel the impact of war on our supplies of manpower. Thus far, critical shortages have appeared in relatively few occupations. But there are unmistakable straws in the wind. Within the last two weeks official steps have had to be taken to counteract the drain of manpower from metal mines and the lumbering industry. Our army is growing by leaps and bounds and nobody can say for sure when the limit to its growth will be reached. Like Great Britain and Germany before us, we are coming face to face with the fact that modern war makes unparalleled demands upon a nation's pool of labor power.

An obvious point about the manpower situation is that supply cannot respond very quickly to increased demand. It is entirely likely that we may alleviate some of our material shortages by building new facilities and by developing substitute products. Strictly speaking, substitutes for manpower cannot be found. And, within any short period of time, it is impossible greatly to increase the number of human beings of working age. The recent rise in the birth-rate will not be a factor for nearly two decades.

Still, something will have to be done, for we are not going to lose this war by permitting our mines and factories and transportation facilities to stop operating. Speaking generally, I see two possible methods of meeting the impending manpower shortage. One is to bring into the picture the groups who have been outside the labor market in the past. In this category we have women and certain minority groups. As the war continues, we are going to have more and more women doing jobs that formerly belonged to men. We are also going to extend the range of occupations open to minori-

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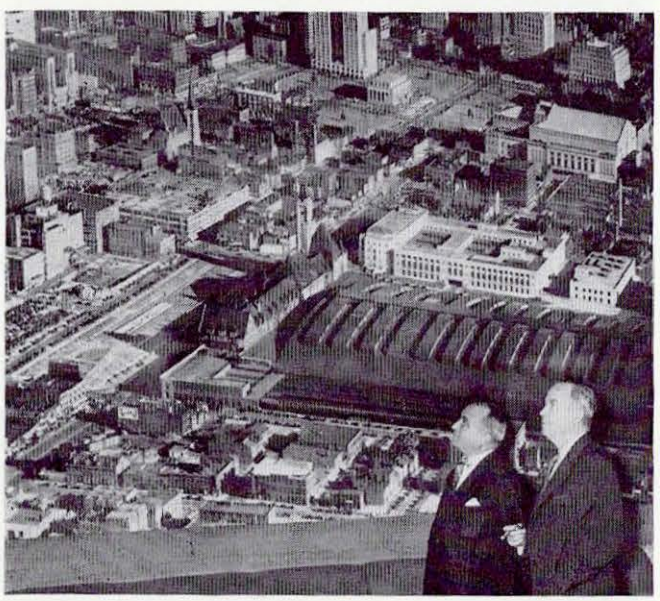

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An obvious point about the manpower situation is that supply cannot respond very quickly to increased demand. It is entirely likely that we may alleviate some of our material shortages by building new facilities and by developing substitute products. Strictly speaking, substitutes for manpower cannot be found. And, within any short period of time, it is impossible greatly to increase the number of human beings of working age. The recent rise in the birth-rate will not be a factor for nearly two decades.

Still, something will have to be done, for we are not going to lose this war by permitting our mines and factories and transportation facilities to stop operating. Speaking generally, I see two possible methods of meeting the impending manpower shortage. One is to bring into the picture the groups who have been outside the labor market in the past. In this category we have women and certain minority groups. As the war continues, we are going to have more and more women doing jobs that formerly belonged to men. We are also going to extend the range of occupations open to minori-

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ties. The second method is to make more effective use of the labor power we have. These two programs are not mutually exclusive. Both will be necessary in the months ahead.

The manpower problem presents itself in a different light as you pass from industry to industry and even as you go from one part of an industry to another. Your manpower problem in the maintenance of way department, for example, is not the same as that in the maintenance of equipment department. It follows that there is no over-all solution. Things will have to be done within the frame-work of each situation.

Last winter, the Office of Defense Transportation undertook, in co-operation with the Association of American Railroads, to make a survey of the railroad manpower situation as it stood then. The results showed that shortages had already begun to appear and that more were impending. Forty-one Class I roads reported that their seniority lists of section men were substantially exhausted as long ago as February 15. More noteworthy, 13 Class I roads reported existing shortages of section men and 43 others expected shortages to develop before July 1. This state of affairs has not improved since that time, and in all likelihood it will grow worse as the war goes on.

What Can Be Done?

Accepting the fact that the manpower problem in your department is serious and is going to become more so, what is to be done about it? I believe it will be useful first of all to dispose of some things which bear upon the whole picture but which should not be the basis for any wishful thinking.

I refer specifically to the question of selective service requirements. Frankly, it is idle to place dependence upon deferments from army service as a means of solving the manpower problem. Local selective service boards are nearing exhaustion of their lists of 1-A men. At the same time, the armed services are in the midst of a vast expansion. Clearly, the result will be a reclassification of men who had previously been deferred.

There has been some misunderstanding in the past on the question of occupational deferments. It seems to have been the impression that an occupational deferment brings an exemption from military service. The fact is that occupational deferments are allowed only to give the employer a reasonable opportunity to find replacements for employees who would otherwise be called immediately. With one minor exception, there are no outright exemptions from military service.

At present, the plan is for the national selective service headquarters to advise the local boards as to occupations which should be given serious consideration when deferments are requested. The War Manpower commission has laid down the rule that occupations requiring six months or more of training be listed with the local boards. If the local authorities are convinced that a real effort has been made to replace an eligible man in one of these occupations, the prospects for a temporary deferment should be good. Needless to say, the amount of consideration given depends directly upon the evidence that can be marshalled to show that genuine attempts have been made to find a replacement.

A more promising avenue of approach is the recruiting of new personnel from sources which had not been tapped previously. As far as your own problem is concerned, however, I am not so sure that there is any easy answer here. We are looking very thoroughly, for example, into the question of using women to handle jobs which usually have been done by men. In England, it has been found possible to utilize large numbers of women in almost every industry. We believe that women should be employed as it becomes necessary and in jobs for which they are fitted. Yet, I have not heard any suggestions that this can be done to any great extent in the maintenance of way department.

In some sections of the country it may be possible to help somewhat by importing laborers for the period of the emergency. This is not a solution which I recommend, nor is it one that can be applied generally. In addition to the numerous difficulties which inevitably accompany a movement of men from one area to another, we might as well face the fact that labor shortages are going to become more and more general.

New Sources Must Be Developed

I do not want to paint too gloomy a picture of the chances for recruiting new workers. There may be sources in your own localities which have not been explored fully and there may be agencies which have not yet been called upon for aid. I am not informed as to the extent to which the railroads have utilized the United States employment service, but this agency has more than 1,500 local offices and more than 20,000 staff members throughout the country and its services are worth investigating.

Again, if age or physical requirements operate to disqualify applicants who might be able to handle a job satisfactorily, these requirements may be modified and made more flexible. This is a matter that must be worked out according to the circumstances of each individual case, but it may offer at least a partial solution to the problem.

Another possibility, and one which I think has not been examined sufficiently, is to level out the peaks and valleys in maintenance operations. In the past it has been a fairly common practice to schedule peak maintenance operations at the same time of the year as demands for labor in agriculture reached their highest level. As long as we had a large surplus of labor, no particular harm resulted from this. Now, with labor shortages hampering the harvesting of crops, it will be well to develop plans for avoiding the coincidence of peak requirements for labor. There are other gains to be had from a more effective stabilization of maintenance work, but for the time being the shortage of labor should be enough of an incentive.

Adequate training programs can be of the greatest assistance in the rapid adjustment of new workers to their jobs, and for that reason the subject cannot be overemphasized. At the same time, your training problem is of a somewhat different nature than that of other sections of the railroad industry. The vast majority of maintenance workers do not need the kind of intensive instruction usually referred to as training. What you have, in effect, is a fairly short breaking-in period during which the man gains a general knowledge of the special tools and technics involved. For the most part, he can pick these up himself without formal instruction.

Makes Two Recommendations

All maintenance work by no means falls into the unskilled-labor category, however. Moreover, it is likely that your greatest difficulty will not be in trying to replace unskilled men but rather in seeking to find men to fill the more skilled jobs. In these occupations, sound

training programs can be of considerable help. My recommendations on this score are twofold.

First, it will be necessary to attempt to fill all vacancies by upgrading. This is true not only because of the over-all labor shortage but also because a much shorter training period is ordinarily required when a man comes with a background of experience in related work.

My second thought relates to the assistance which certain government agencies can give in preparing training programs. In the federal government, all training services are now located in the Federal Security Agency. Of these, at least two deserve your particular attention. One is the so-called training-within-industry service which is staffed by a group of top-flight training experts who have been loaned to the government by private industry. This agency places special stress upon the training of job instructors and foremen, on the theory that teaching other workers requires certain technics which the average supervisor or foreman has not had an opportunity to obtain.

Another agency in this field is the apprentice—training service which is concerned chiefly with long-term training through an established apprenticeship system. Its staff is aware that apprenticeship training, like everything else, has to be speeded up during the war. The field men, therefore, work with the training-within-industry service in helping to work out training programs which can be completed in shorter periods of time than the customary apprenticeship term.

It is my impression that the transportation industry has been a bit shy about going beyond its established training practices. This probably follows in part from the fact that the need for new training methods has not been great in recent years. At present, nonetheless, I feel that it is missing a bet if it fails to investigate the possibilities of the various aids which the government is willing to supply. No obligation is involved and even if the existing government programs do not fit precisely the needs of transportation, they can always be tailored and adjusted. We are now preparing a catalog of the principal services which are available and the offices throughout the country where these services can be obtained. I think it will be worth while to give it careful scrutiny.

Minimize Seasonal Fluctuations

Sound recruiting and training programs are necessary and helpful. In your case, you may be able to do something about stabilizing operations at a fairly constant level throughout most of the year, thereby avoiding large-scale labor requirements during certain months. But all these things have their limitations and certainly no one of them is going to be a complete answer to the problem.

I think it is clear that whatever can be done in these directions must be supplemented by a program for making the most effective use of the manpower you are going to be able to get.

I am not suggesting that hours of work can be lengthened very much, or that employees can be asked to do a great deal more actual manual labor than in the past. The evidence is conclusive that these methods of stretching out labor have very definite limits, aside from the general undesirability of overburdening or overworking men. I know also that during the war we are not going to be able to get significant amount of new labor-saving machinery to offset the scarcity of labor power. The answer has to be found in improved methods and organization for doing the job under pretty much the same conditions as before.

All Possibilities Must Be Explored

To sum up, I have dealt briefly with the general manpower situation as we see it today. The picture is not good by any means, but there surely is no reason to throw up our hands in despair. I have tried to outline the various ways in which the problem can be attacked and I have sought to emphasize that we cannot afford to concentrate on any one front to the exclusion of the others. Recruiting, training, stabilization of operations, more effective use of manpower—these are all pieces in the puzzle. I believe personally that they will be fitted together properly and that we will be able to carry on reasonably well in the difficult months that lie ahead.

It is important that the public generally, and the officials in Washington particularly, should understand that transportation is as necessary to the prosecution of the war as tank or aircraft production. We in the Office of Defense Transportation have emphasized this fact consistently, and I think it is now well recognized in most official circles. It is also a part of your job to emphasize this matter, not that you are asking for any special advantages; nobody in the whole transportation industry wants that. But you deserve, and I believe you are getting, the same consideration as the other parts of our war economy. Given that much, I have no fear about the transportation industry falling down on the job.

War an Incentive to Accounting Economies

(*Continued from page 567*)

Upon their receipt at the bureaus, they are revised and, if proper, drafts are drawn in settlement. The majority of overcharge claims, if proper, are settled within one week of receipt. If investigation is required, receipt of overcharge claim is acknowledged to patron.

The total effect of the audit revision work conducted by the bureaus has been a substantial reduction in the number of overcharge claims, undercharge bills, corrections, auditors' changes, etc., which has been of material aid in maintaining freight station accounting on a reasonably current basis. Overcharge claims and undercharge bills have been reduced approximately 65 per cent.

The bureaus report to the auditor of freight accounts, on definite schedule, waybills received and issued. Interline received waybills are sorted and reported in issuing carrier order with group totals. Reports to the auditor of freight accounts of local and interline switching and accessorial charges have been discontinued, the bureaus merely reporting totals monthly by I. C. C. accounts.

Correction accounts, involving local billing, have been eliminated, adjustments being made by the bureaus through the primary revenue account.

The bureaus have a definite procedure for following up delinquent accounts with the agents and treasurer until disposed of. The bureaus balance, daily, station remittances, as reported, with statements from depositories of remittances received. The bureaus also investigate excessive cash balances carried forward by agents. The present procedure at the bureaus includes

all station accounting incident to ticket sales, excepting the preparation of ticket reports.

The New York Central bureau system of station accounting is analogous to a continuous audit of station accounts and has materially benefited the traveling auditors, since the time saved in balancing accounts can be used for exploring other avenues of revenue protection and a better review of station matters, in general, with the agents. The station accounts of all freight and ticket offices on the New York Central are reflected by ten monthly balance sheets, resulting in substantial economies in recording and handling station agents' accounts at the general office.

Notwithstanding that the bureau and station personnel are again entering the armed forces of our country, the procedures introduced as a result of the research conducted after World War I places the New York Central in a more strategic position for controlling today's situation. Research in further improvement of the procedures of all branches of accounting is being pursued.

Accidents in 1941

WASHINGTON, D. C.

RAILWAY accidents of all kinds in 1941 brought death to 5,086 persons and injuries to 37,811, increases respectively of 10.28 per cent and 27.78 per cent over the 1940 figures, according to Accident Bulletin No. 110 which has just been issued by the Interstate Commerce Commission's Bureau of Transport Economics and Statistics. Meanwhile train-miles were up 10.87 per cent, so the fatality rate per million train-miles was down slightly to 5.25 as compared with 1940's 5.28. As the Bureau points out, the 1941 rate "compares favorably with the average rate for the past decade." Only 1939 with its rate of 5.17 made a better showing, although the rate 12 years ago in 1930 was 5.06.

On the other hand, 1941's non-fatal injury rate of 39 per million train-miles was higher than that for the previous three years, but approximately that for the years 1936 and 1937 when rates of 39 and 40, respectively, were reported. The 1940 rate was 33.9, while in both 1938 and 1939 it was 33.4. "The greater percentage of increase for the non-fatal injuries," the Bureau says, "is explained principally by the fact that there was a much larger increase in accidents to employees than to other classes of persons. Among employees, injuries predominate over fatalities to a much greater extent than among other classes of persons taken as a whole."

Discussing fatalities to passengers, the Bureau notes the "marked reduction" in 1941 as compared with 1940. Last year 42 passengers, including travelers not on trains, were killed in railway accidents of all kinds, whereas in 1941, 82 passenger fatalities were reported, "the largest number since 1929 in which year 100 were reported." The number of non-fatal injuries to passengers in 1941 was 3,781 compared with 3,344 in 1940—an increase of 13.07 per cent. The 1941 fatality rate per billion passenger-miles was down to 1.43 from 1940's 3.44, while the injury rate dropped from 140.4 to 128.8.

The increase in casualties to employees in 1941, the Bureau points out, "was much greater than the increase in man-hours worked." The number killed in all kinds of accidents was 749, as compared with 533 in 1940; while the number injured was 25,265, as compared with 17,903. The percentage increases in employee fatalities and non-fatal injuries were nearly the same—40.53 per cent and 41.12 per cent. Meanwhile, man-hours increased only 14.5 per cent over 1940, so the fatality rate per million man-hours was up from 0.210 to 0.258, and the non-fatal injury rate rose from 7.05 to 8.69. "Noteworthy" among the casualties to employees, the Bureau says, are those arising from train-service accidents caused by "sudden stopping, starting, lurch or jerk of locomotive, car or train; stepping or tripping on coal, boards, stone, rubbish, or other loose or refuse material, or in holes; and falls from locomotives or cars."

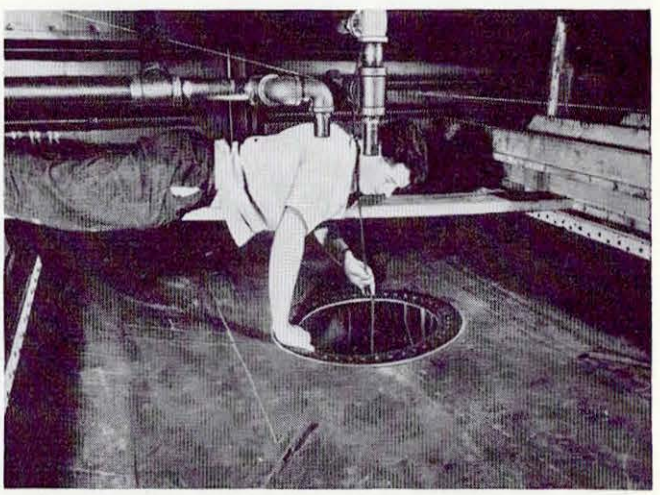
With respect to employees, the aggregate disability from temporary and permanent non-fatal injuries in 1941 amounted to 1,071,892 days. The Bureau calculates that at an estimated rate of pay of $5 per day, this "would indicate an economic loss in time amounting to $5,359,460." A similar calculation in the previous Bulletin placed the 1940 economic loss at $3,985,110.

Trespasser fatalities in 1941 totaled 2,146, an increase of 5.87 per cent over the previous year, but less than in any of the 10 years preceding 1940. Last year's casualties to trespassers were lower in relation to train-miles than in any year back through 1930. Figures on the number of trespassers ejected from railway premises in 1941 indicate that there was much less trespassing last year than immediately previous years.

The 4,320 accidents at grade crossings in 1941 killed 1,931 persons and injured 4,885, increases over 1940 of 6.8 per cent and 5.46 per cent, respectively. These accidents accounted for 38.44 per cent of the fatalities and 22.16 per cent of the injuries in all 1941 accidents involving train operation.

Discussing train accidents, the Bulletin calls attention to the fact that 1941 saw 9,401 such accidents, an increase of 32.3 per cent over 1940. It goes on to note that the 1941 rate of train accidents per million locomotive-miles and motor-train miles was "higher than that for any of the 10 preceding years." A table comparing 1941 and 1930 train accidents by causes shows that the "negligence of employees" cause became relatively more important over the 12-year period. In 1941, 44.26 per cent of the train accidents were attributed to "negligence of employees" whereas in 1930 that cause accounted for only 34.36 per cent. Accidents due to "defects in or failures of equipment" accounted for 40.8 per cent of the 1930 total, but they were down to 26.44 per cent in 1941. The relative number of accidents due to "defects or improper maintenance of way and structures" remained about the same—11.22 per cent of the 1930 total and 12.18 per cent in 1941. "Miscellaneous" was up from 13.62 per cent in 1930 to 17.12 per cent in 1941.

* * *



Attachments for Filling Experimental Mareng Cell for Box-Car Shipment of Petroleum

Railroads-in-War News

Senate Probes Rail Seizures by WPB

Investigation of requisitioning was called for in speedily enacted resolution

Investigation of practices and policies followed by the War Production Board, the Office of Defense Transportation, and Reconstruction Finance Corporation affiliates with respect to the requisitioning of railroad properties was begun this week at public hearings before a sub-committee of the Senate committee on interstate commerce. The sub-committee, headed by Senator Johnson, Democrat of Colorado, was created under Senate Resolution 297, introduced October 1 by Senator Reed, Republican of Kansas, and adopted the following day.

Mr. Reed secured unanimous consent for prompt action when he stressed the "urgency" of the situation arising as a result of the requisitioning activities, which are "widespread," extending to rail lines all over the country. Mr. Reed said he had "spent about a week" trying to find out how much steel rail WPB needs. He also said that Director Eastman of ODT "cannot find out," adding that "it is about time for somebody to find out."

The first witness at the hearing was J. Wideman Bertch, chief of the Special Projects Salvage Section of WBP's Conservation Division. He told how the rail-requisitioning job, which the Army, Navy, and WPB has power to do, was finally given entirely to WPB because it had facilities for "rapid, organized action." Proceeding in response to questions from Chairman Johnson and Senator Reed, the witness explained the requisitioning steps.

It thus developed that the Army and ODT are consulted, but not the Interstate Commerce Commission. The Army is asked to determine whether or not the road in question is essential from a military standpoint; while ODT is asked whether it is "essential to wartime transportation requirements." Mr. Bertch thought the question asked ODT would embrace civilian transportation, "in so far as it is part of essential wartime transportation;" but he conceded there is no determination as to whether public convenience and necessity, as ordinarily appraised, will permit the abandonments involved. He readily admitted that WPB was doing "a drastic thing," but at the same time insisted that there was not time to wait for the usual convenience-and-necessity determinations by the I. C. C.

Asked if there was any consideration of the possible need for the rail lines as truck transportation is curtailed for lack of rubber, Mr. Bertch replied that this should be a factor in the determinations received from ODT. The emergency, the witness went on, is "most serious," the time element "important," and the demands "great." Requisitioning, he added, was "put off as long as possible, perhaps too long," with the result that WPB "had to start out behind the need, and it is trying to catch up." In this connection WPB has reports from the Army showing that lack of rail delayed construction on 76 projects in June, 68 in July and 24 in August.

The total requirements for the last half of 1942, as reviewed on October 1, call for 60,360,000 ft. of rail. Thus far there have been requisitioned 11,854,867 ft. of which 86 per cent was found fit for relaying. Allocations of the requisitioned rail are made by WPB's Transportation Equipment Branch.

Mr. Bertch was followed by Major E. T. Butler, representing the Army and Navy Munitions Board, who was accompanied by Lieutenant Colonel F. G. Sherrill, chief of the Materials and Equipment Section, Operations Branch, Construction Division, Office of Chief of Engineers. They testified as to the Army's requirements, pointing out among other things, that in using relay rails the Army has saved steel productive capacity for other essential war needs. Major Butler was unable to say whether WPB exercised good judgment in selecting the lines to be requisitioned.

Meanwhile it has been learned that WPB anticipates increased requisitioning activity in the near future, since freezing weather would make the salvage operations more difficult. Thus far more than 1,200 miles of lines have been taken, and authoritative sources indicate that 100 additional requisitioning projects are in the offing. WPB is not unaware of the community and Congressional opposition to its requisitioning activity, but is represented as being confident that such opposition will not persist when the urgency of the situation is realized by the protestants.

ODT Advisory Committees

Four additional advisory committees have been formed by Director Eastman to collaborate with the field staffs of the Office of Defense Transportation's divisions of Railway Transport and Motor Transport "on rail-truck coordination studies and railroad matters in general." The new committees are in Detroit, Mich., Philadelphia, Pa., St. Louis, Mo., and Buffalo, N. Y. Like those already functioning in Boston Mass., Chicago, Memphis, Tenn., and Pittsburgh, Pa., their membership represents "a cross-section of the shippers in their respective communities."

President Orders Wage Stabilization

Follows through promptly on "anti-inflation" legislation enacted last week

Stabilization of wages and salaries, as well as rents and farm prices, was ordered by President Roosevelt on October 3 as he followed through promptly on Congress' enactment of "anti-inflation" legislation to issue an executive order creating the Office of Economic Stabilization and appointing Associate Justice James F. Byrnes of the Supreme Court to be its director. Mr. Byrnes resigned from the court to assume the post.

The National War Labor Board, acting in accordance with policies laid down by Director Byrnes, was designated by the President as "the agency of the Federal Government authorized to carry out the wage policies stated in this order"; and the functions of NWLB were "extended to cover all industries and all employees." Thus the railroad industry is embraced, although the order does stipulate elsewhere that nothing in it shall be construed as affecting "the present operation of the Fair Labor Standards Act . . . or the adjustment procedure of the Railway Labor Act"; and that "the policy of the Federal Government . . . to encourage free collective bargaining between employers and employees is reaffirmed and continued."

All of which would seem to mean that railway wage cases, such as the pending demand of the non-operating unions, can still go through usual procedures, but settlements would have to be approved by NWLB before they could be made effective. Meanwhile, NWLB's freedom to approve increases is restricted by the order, which stipulates that no wage adjustment above the rates prevailing on September 15, 1942, shall be approved unless it is necessary "to correct maladjustments or inequalities, to eliminate substandards of living, to correct gross inequities, or to aid in the effective prosecution of the war." Moreover, in cases where NWLB or Price Administrator Henderson have reason to believe that a proposed wage increase will require a change in the price ceiling of the commodity or service involved, such proposed increase, if approved by NWLB, "shall become effective only if also approved by the director."

Other phases of the wage and salary policy set forth in the order provide for a ceiling of $25,000 a year on salaries after payment of taxes and "due allowance" for the payment of life insurance premiums and fixed obligations contracted prior to the

issuance of the order. Also, "until otherwise determined by the director" there is a ban on increases in salaries now in excess of $5,000 a year—"except in instances in which an individual has been assigned to more difficult or responsible work." Furthermore, there are to be no increases or decreases in wage rates, made either voluntarily or through collective bargaining, or otherwise, unless notice of such changes is filed with NWLB and the latter has approved. No decrease may be approved in the wage for any particular work below the highest wages paid therefor between January 1, 1942, and September 15, 1942, "unless to correct gross inequities and to aid in the effective prosecution of the war."

Like previous price-control legislation, last week's act leaves rates of railroads under control of the Interstate Commerce Commission, although there is a provision stipulating: "That no common carrier or other public utility shall make any general increase in its rates or charges which were in effect on September 15, 1942, unless it first gives 30 days' notice to the President, or such agency as he may designate, and consents to the timely intervention by such agency before the federal, state, or municipal authority having jurisdiction to consider such increase." The executive order designated Director Byrnes as the agency to receive such notices.

In view of the fact that the Interstate Commerce Commission has always permitted the intervention in its proceedings of any government agency, this provision does not alter the present situation—except to the extent that an OES intervener representing the President might make a deeper impression than intervening government-agency representatives of the past. The latter appeared to be the view of Senator Norris, Independent of Nebraska, who went along when the Senate and House conference committee substituted the foregoing provision for the amendment Senator Norris had inserted in the bill's Senate version to require that "rates charged by any common carrier or other public utility on September 15, 1942, shall not be increased without the consent of the President."

As noted in the *Railway Age* of September 19, page 455, the Nebraskan was sponsor of another pending bill (S. 2767) which would prohibit increases in public utility or common carrier rates without the consent of the Price Administrator. Thus his proposed amendment to the anti-inflation bill was the same, except that consent of the President instead of the Price Administrator would be required; and also the amendment, as originally offered, contained a proviso stating that nothing in it should be construed as affecting the power of a regulatory agency "to reduce prices, rates or charges subject to its jurisdiction."

At the suggestion of Senator McKellar, Democrat of Tennessee, who had the South's interterritorial rate complaint in mind, Senator Norris agreed to broaden the proviso to leave regulatory agencies free to "equalize" as well as to reduce rates. Whereupon Senator Bone, Democrat of Washington, suggested that the equalization phase had no application to utility rates; and the proviso, as finally written, became one leaving regulatory agencies free to reduce rates subject to their jurisdiction, and "to equalize rates and charges of common carriers."

When the substitute provision written by the conference committee came before the Senate, Mr. Norris brought out the fact that the President's representative would be merely an intervener "with absolutely no authority to participate in the decision." Nevertheless, he went along because he thought such intervention would have "a great moral effect." Explaining what he had in mind, the Nebraskan went on: "The tribunal, board, or commission which acted to increase rates in the face of a showing that such action might lead to the worst kind of inflation would find itself in a position which no board would want to be in." Also, Mr. Norris indicated that he would not press his separate bill, although he was urged to do so by Senator Bone, who did not share the Nebraskan's feeling of assurance "about the moral interposition of the President in this matter."

The Office of Economic Stabilization, like other war agencies, was established in the Office for Emergency Management of the Executive Office of the President. In his role as director, former Justice Byrnes is directed to "advise and consult" with an Economic Stabilization Board, consisting of the Secretary of the Treasury, the Secretary of Agriculture, the Secretary of Commerce, the Secretary of Labor, the Chairman of the Board of Governors of the Federal Reserve System, the Director of the Bureau of the Budget, the Price Administrator, the Chairman of the National War Labor Board, "and two representatives each of labor, management, and farmers, to be appointed by the President."

ODT Appointment

Patrick B. McGinnis of New York has been appointed executive administrator of the newly-established Railway Protective Section in the Office of Defense Transportation's Division of Railway Transport. The section, the announcement said, "will carry out ODT's plans for coordination of the efforts of all railroads to guard against sabotage and other destructive acts, and will cooperate with the Office of Civilian Defense, the military and naval intelligence, the Federal Bureau of Investigation and other government agencies.

Mr. McGinnis, the announcement went on, "has had long experience in railroad reorganization work," having been associated with "Pflugfelder, Bampton & Rust, railroad analysts, New York City."

ODT Counsel Predicts Further Passenger Restrictions

After outlining some of the reasons for ODT General Order No. 24, "freezing" passenger train schedules, Jack Garrett Scott, general counsel of the Office of Defense Transportation, stated in an address on October 3, delivered before the Foreign Policy Association in New York, that "other measures are in process to eliminate duplicate trains, or rail passenger service where other service is adequate, or the other service if the rail service is adequate, to require abandonment of many local or feeder lines where the lines are not really essential, and to divert their rails to scrap or to relay purposes."

The speaker's remarks constituted a comprehensive outline of the problems faced by the Office of Defense Transportation, and of the measures so far "taken to conserve and make the most efficient possible use out of the facilities we have." Some of the effects of these measures—not only on rail transportation, but on highway vehicles, Great Lakes vessels, storage facilities, and other parts of the domestic distribution machine—also were reviewed. Mr. Scott concluded by suggesting that, in the days to come, it is quite possible for "our domestic transportation situation to become so serious that it will result in many hard deprivations and sacrifices to our people, many acute changes in our normal way of life, many serious obstacles to production, and distribution, and supply."

Chartered Commuter Cars Exempted from Freeze Order

Cars chartered for group use in suburban commuting service have been exempted from that phase of the Office of Defense Transportation's passenger-schedule-freezing order which prohibits the operation of cars for the exclusive occupancy of a group. The exemption came in General Permit ODT 24-1, effective October 4 simultaneously with the freeze order.

The permit limits the use of chartered commuter cars to schedules on which they already have been operating continuously for one year at least five days a week. Application of the permit is further restricted to rail carriers operating a scheduled passenger train which furnishes daily round-trip commuting service not less than five days a week, exclusive of holidays. This permit provides also that unoccupied seats on the chartered cars must be available for use of overflow passengers from other cars on the train without extra charge and that operation of the chartered cars must not prevent inclusion of any other cars in the train.

Will Probe Alleged Discrimination Against Negroes

The President's Committee on Fair Employment Practices, an agency of the War Manpower Commission, will hold hearings in Washington, D. C., on December 7, 8 and 9, on complaints alleging discrimination against the employment of Negroes in the railroad industry. The hearing was announced this week by Dr. Malcolm S. MacLean, chairman of the committee, who said that formal complaints on the matter had been received.

The complainants include such organizations as the Provisional Committee to Organize Colored Locomotive Firemen, International Association of Railway Employees, Association of Colored Railway Trainmen and Locomotive Firemen, Inc., International Brotherhood of Firemen, Oilers, Helpers, Roundhouse and Railway Shop Laborers, and National Association for the Advancement of Colored People.

"It is asserted," Dr. MacLean said, "that there exists agreements between the roads employing the greatest number of Negroes, and certain unions to which Ne-

groes are not admitted, which in operation excessively restrict the number of Negro firemen and brakemen who may be employed, which bar Negroes as helpers on Diesel engines, and which give non-Negro firemen the preference on stoker-fired steam engines, regardless of seniority or length of service."

Dr. MacLean also said that charges had been made to the effect that Negro brakemen and firemen are being paid substantially less than white men in the same class of jobs. The committee's preliminary investigation of the situation is being carried on under the direction of M. P. Webster, a member of the committee and vice-president of the Brotherhood of Sleeping Car Porters.

I.C.C. Amends Service Order on Giant Reefers

The Interstate Commerce Commission, Division 3, on October 5 amended Service Order No. 86 to eliminate that proviso of the original order which had exempted refrigerator cars owned by the Pacific Fruit Express Company and the Atchison, Topeka & Santa Fe refrigerator car department. It now applies to those cars.

As noted in the *Railway Age* of October 3, page 538, the order suspended Transcontinental Freight Bureau tariffs containing limitations, restrictions, and rate penalties on the use of so-called giant-type refrigerator cars, and required railroads serving points in Arizona and California to place such cars for loading with commodities suitable for transportation in refrigerator cars.

Applications for Certificates of War Necessity Being Mailed

Mailing of application blanks for certificates of war necessity, which must be obtained by truck operators under the Office of Defense Transportation's General Order No. 21, was started on October 2 by ODT's Detroit, Mich. office. The mailing is expected to be completed within three weeks, the 17 states in the gasoline rationed area being covered first.

The applications will go to every person in the United States who was registered on December 31, 1941, as the owner of a commercial motor vehicle. The mailing schedule, the ODT announcement said, "will allow ample time for all those required to have certificates to obtain them" before the November 15 effective date of the order—"provided the applications are properly filled out and promptly returned."

Authorizes Substitute Bus Service on Seashore Lines

The Office of Defense Transportation has authorized the Pennsylvania-Reading Seashore Lines to substitute motor bus service for steam passenger, express and baggage train service operated between Fifty-first street, Ocean City, N. J., and Sea Isle City. The authorization was granted in a supplementary order to General Order ODT No. 2, which prohibits such substitutions without authorization of ODT.

The supplementary order (ODT No. 2-4), which became effective October 5, provides for the operation of the substitute bus service by the Public Service Interstate Transportation Company under a contract with Pennsylvania-Reading. Under the terms of the order, the railroad must apply for and obtain from appropriate regulatory bodies the authority to abandon such rail service and to remove the rails over which it is conducted. The length of line involved is 6.72 miles.

High-Cost Scrap Seeker

Trinity Court Studio

J. M. Hopwood

The president of War Materials, Inc., a corporation with $500,000,000 capital created by the Reconstruction Finance Corporation, is looking for buildings and other structures to wreck for iron and steel scrap which cannot be obtained at regular prices. The War Production Board is getting out the more accessible tonnage. Mr. Hopwood, who in private life is president of the Hagen Steel Corporation of Pittsburgh, has appealed to all the railroads for aid in locating iron and steel structures which can be dismantled.

"We have been assigned the job," he said, "of bringing in a minimum of 5,000,000 tons of scrap within the next few months. We have the authority and financial backing and will have no excuses."

ODT Orders Immediate Return of Empty Tank Cars

Taking "a further step toward keeping the nation's 143,000 tank cars rolling continuously," the Office of Defense Transportation has ordered all railroads to return tank cars to their "last point of origin" immediately after unloading, unless other provision has been made for their disposal. The order came in Special Direction ODT 7-1, effective October 10, which is expected to save "many thousand car-days monthly for the transportation of petroleum to the East and the movement of other war-essential materials shipped in tank cars."

"Recent studies reported to the ODT," the announcement said, "have shown that hundreds of tank cars have remained at their destinations for several days after they were unloaded—in some cases as long as 10 days or more. In most instances failure of the cars to move has been due to the lack of instructions from the shipper to the consignee or the railroad. To remedy this situation the ODT directed that unless the railroad has received contrary instructions from the shipper or unless otherwise specified by the ODT, the carrier, immediately after the unloading of any tank car and regardless of the ownership thereof or of the track on which such car is located, shall forward such empty tank car to its last point of origin over the route traveled by such car when loaded. . . ."

ODT Extends Control of Great Lakes Vessels

Formalizing its previously-announced plan for complying with the recent War Production Board directive calling for a new schedule of shipping priorities for ex-lake iron ore, the Office of Defense Transportation has issued General Order No. 25 and thereby assumed control "of all commercial vessels operating in domestic traffic" on the Great Lakes. The order which becomes effective October 19 thus makes virtually all-inclusive the permit system, heretofore applied to only a portion of the lake fleet.

Concurrently with the issuance of the general order, Mr. Eastman suspended permit requirements with respect to the transportation of iron ore and certain other commodities (coal, coke, iron and steel scrap, blast furnace fluxstone, limestone, and package freight) shipped under specific conditions, and the operation of craft of less than 1,000 gross tons. At the same time the ODT director issued Revocation of General Order ODT No. 8, revoking an earlier order which restricted grain shipments on the lakes. These movements will be controlled by the new general order.

New List of "Essential" Jobs in Transport Industry

The National Headquarters of the Selective Service System has issued Occupational Bulletin No. 21, listing for the guidance of local selective service boards the so-called critical occupations in the transportation industry. The bulletin supersedes Occupational Bulletin No. 5, issued last May, as noted in the *Railway Age* of May 9, page 919.

Noting that the War Manpower Commission has certified that transportation service "is an activity essential to the support of the war effort," Bulletin No. 21 goes on to set up its critical lists for railroads, air, motor, water and pipe-line transportation, local transit, rail and air express service, freight forwarding, and warehousing.

The railroad list which embraces express and forwarding services, runs to 116 occupations—from "accountant" to "yardmaster." The occupations, the bulletin explains, are those "requiring a reasonable degree of training, qualification or skill to perform the duties involved." It adds: "It is the purpose of this list to set forth

the important occupations in transportation service activity which must be filled by persons capable of performing the duties involved, in order that the activity may be maintained efficiently. . . . The list is restricted to occupations requiring six months or more of training and preparation."

In classifying registrants employed in the activities listed, local boards are requested to give consideration to: (a) The training, qualification, or skill required for the proper discharge of the duties involved in his occupation; (b) the training, qualification, or skill of the registrant to engage in his occupation; (c) the availability of persons with his qualifications or skill, or who can be trained to his qualification, to replace the registrant and the time in which such replacement can be made.

ODT Sponsors Joint Union and Management Committee

Creation of a permanent joint committee "to function under ODT's auspices" is the stated purpose of an October 29 meeting which Director Eastman has arranged between committees of railroad executives and officers of railroad labor organizations. At the same time Mr. Eastman announced that American Trucking Associations would have a group of management representatives attend an October 23 meeting with a committee of the International Brotherhood of Teamsters to work out plans for a central management-labor committee in the motor truck industry.

Members of the railroad executives' committee, designated by the Association of American Railroads, are: M. W. Clement, president of the Pennsylvania; E. W. Scheer, president of the Reading; J. B. Hill, president of the Louisville & Nashville; E. E. Norris, president of the Southern; H. W. Baldwin, chief executive officer of the Missouri Pacific; and C. E. Denney, president of the Northern Pacific. The committee representing the railway labor organizations consists of the following: D. B. Robertson, president, Brotherhood of Locomotive Firemen and Enginemen; George M. Harrison, grand president, Brotherhood of Railway Clerks; S. J. Hogan, president, National Marine Engineers' Beneficial Association; B. M. Jewell, president, Railway Employees Department, American Federation of Labor; and A. F. Whitney, president, Brotherhood of Railroad Trainmen.

According to the ODT announcement, the management-labor committees will be concerned with the following functions: Calling attention to matters involving the industry and its employees which may concern ODT; consultation with ODT on policies and activities which are of interest to employees and management; and enlisting the cooperation of employees, management, and their organizations for the efficient and economic utilization of all transportation facilities for the duration of the war.

Commenting on the plan, Mr. Eastman had this to say: "Among the lessons which war has taught us is that management and labor have a mutual interest in solving problems incident to the war effort. The Office of Defense Transportation has already benefited greatly from the consultation and advice supplied by labor and management in the transportation industries. We feel now that our consultative relationships with committees from labor and management separately should be supplemented by the formation of joint committees representing the two parties. It is our belief that these committees will furnish concrete evidence of the ability of management and labor jointly to deal with problems quite outside the usual sphere of collective bargaining. Their influence, we hope, will be transmitted down to all levels where management and labor are faced with wartime problems."

Additional Equipment Needed

Only by the continuous addition of new equipment, as well as by the repair of fixed plant and rolling stock, can the railroads maintain the adequacy of service essential to a successful prosecution of the war and the preservation of the civilian economy, according to L. M. Betts, manager of the Railroad Relations section of the Car Service division of the Association of American Railroads before the sixtieth regular meeting of the Mid-West Shippers Advisory Board at Chicago on October 1. "Only by surpassing all previous records of operating efficiency in the use of equipment," Mr. Betts continued, "has it been possible for the railroads to meet the growing demands of both freight and passenger traffic. Without the unparallelled co-operation received from railroad patrons and the intelligent support of the government, these results could not have been achieved. But there is a limit to such accomplishments. Furthermore, we are approaching the winter season when a severe drop in operating efficiency is certain to occur. This will be accentuated if we have, as seems possible, an unusually severe winter.

"The railroads will continue to expand their plant capacity by every operating efficiency known to science. We are certain that the shippers and government representatives will continue their splendid record of co-operation to maintain service from cars and locomotives. It would be difficult, if not disastrous, to attempt segregation of traffic by priorities. Only through reasonable increases in plant capacity through allocation of necessary materials can we be certain of meeting the increased traffic load which quite certainly lies ahead in the coming year."

Joseph B. Eastman, director of the Office of Defense Transportation, in a message read to the meeting, warned shippers that he could not predict the time of maximum freight movement or how big it would be, but said, "I do feel sure that the peak has not yet been reached, that the difficulties will multiply, and that the situation with respect to critical materials is such that we can expect only a very limited expansion of facilities. In fact, so far as highway motor transportation is concerned, the facilities are bound to contract, although we hope and believe that the rate of contraction can be held within low limits."

Milwaukee Places Bond Car In Service

A traveling billboard in the form of a 76-ft. coach painted red, white and blue and carrying the legend "Buy War Bonds" was placed in service by the Chicago, Milwaukee, St. Paul & Pacific, on October 1, to aid in the sale of war bonds. The color scheme of the car, designed and painted in the company's shop at Milwaukee, uses gray for the roof, blue for the background

This Traveling Billboard, a 76-ft. Coach, Will Pass Through Almost Every City on the Milwaukee

of stars on the top and bottom edges of the car, vermilion for the panel containing the windows and white for the background of the legend "Buy War Bonds," the letters of which are gold leaf edged with black. At each end of the side of the car, this design blends into the conventional maroon and orange of the Milwaukee. The car is being operated as a day coach in regular scheduled trains and will eventually cover the entire system.

Teamwork Can Win the War

Teamwork and nothing else can win this war, according to Col. Robert S. Henry, assistant to the president of the Association of American Railroads at a special luncheon of the Northwest Shippers Advisory Board held at Minneapolis, Minn., on October 6, in co-operation with Minneapolis Traffic Club. At the regular meeting of the board, national transportation conditions, the handling of the grain crop under provisions of I. C. C. Service Order No. 80, pending legislation and plans of the Rail-Truck Co-ordination section of the Division of Railway Transport of the ODT were discussed.

Mr. Henry, in emphasizing the importance of teamwork, stated that in the "team" there is no more vital member than transportation and most fortunately for this nation, there is no part of the whole war effort in which teamwork has been longer practiced or is better organized or more effective than in railroad transportation. As an example of teamwork, he cited the regional advisory boards which have worked together to procure the best use of the railroad plant, with the result that in the 20 years of their existence there has been nothing even resembling a general car shortage.

"In 1942," Mr. Henry continued, "the railroads will be able to meet the demands by reason of teamwork in the more efficient use of the equipment available. Never before has so much transportation been produced by each car and each locomotive, or on each mile of track, as is now being turned out by this transportation team.

"But after 1942 there will be more traffic to move. Just how much more no one can say with certainty. But we know, as well as we know anything in the future, that it will be well above the 1942 load and that load is running far above the load of 1941, which in itself was a record-breaker.

"This increased demand for freight transportation service will come despite sharp reductions in civilian movement. Indeed, it may be truly said that almost without exception the freight which will move in 1943 will be war freight. We are accustomed to think of the production of arsenals and industrial plants as 'war material.' But what of the food which it takes to sustain the men in the field and those who man these industrial plants? What of the fuel for heat and power, without which the whole effort would collapse? What of the thousand other things which, though neither shot at the enemy nor used by our fighting forces, yet are essential to the maintenance and operation of the war machine? These things, too, must be moved, and more and more they must be moved by rail.

"Public authority must determine how best to allot the nation's limited stock of critical materials to meet the almost unlimited demands of this war. It is our hope that the men upon whom this heavy responsibility has been laid will find it possible to let the railroads secure the steel and the other materials which they must have if they are to maintain their plants at present efficiency."

Materials and Prices

Following is a digest of orders and notices of interest to railroads, issued by the War Production Board and the Office of Price Administration since September 25.

Dry batteries—Order L-71, as amended October 3, establishing an over-all control over the production of dry cell batteries and flashlights for civilian use, reduces the production of flashlight batteries by one-half, as compared to the 1941 output, and reduces other types of dry cell batteries by 10 per cent, although the order provides that batteries for railroad lanterns will be produced in greater quantity during the quarter ending December 31, 1942. The output of flashlights and other types of portable electric lights, such as electric lanterns, will be 2 per cent of the output in 1941. Supplies of flashlight batteries will continue to be available. Flashlights and other portable electric lanterns in the hands of manufacturers will be released primarily for industrial use, and then only for orders bearing a preference rating of A-10 or higher. No direct restriction is placed on sales of lights in the hands of dealers and wholesalers, but the only way they can replenish their stocks is by certification that their sales have been only for A-10 or higher orders. Therefore, unless dealers and wholesalers restrict their sales to A-10 or better order, they will be unable to replace their inventories.

Fuel oil—Amendment No. 4 to Limitation Order 56, issued September 30, requires that sales of fuel oil to all consumers within the 30-state rationed area can be made after October 1 only in accordance with a coupon credit system. The credit system provides that every consumer, dealer and supplier who receives deliveries of fuel oil for any purpose must execute a written promise to surrender to the seller coupons for the number of gallons of fuel delivered as soon as the coupons are available. Consumers must redeem these written promises, or coupon notes, within 15 days after the OPA Fuel Ration Order is issued about the middle of October. Dealers and suppliers who will be required to register later in October must register inventory and storage capacity as of October 1. Consumers, who register during October, will state their inventories as of October 1, and their rations will be computed as from October 1. All fuel oil dealers in the 30 rationed states were called upon by OPA on September 29 to help customers register for fuel oil rations by furnishing them certified information about their last year's purchases.

Hand tools—Schedule No. 4 of Order L-157, governing the production of hand tools, as issued October 3, restricts the manufacture of heavy forged hand tools to certain sizes, types, grades, finishes, weights and standards. Tools covered by the schedule include bars; blacksmiths' anvil tools; mauls and hammers or sledges weighing 4 lb. or over; hoes weighing 3½ lb. or over; mattocks, picks, railway track tools, tongs and wedges; mine blasting hand tools, mine breast drills and miscellaneous other forged hand tools. Varieties of heavy forged hand tools are reduced from approximately 1,150 to 357. Parts for repair and maintenance of heavy forged hand tools are not subject to the limitations of the schedule. Tools, special to railway work, include track chisels, rail forks, spike pullers, tie plug punches, track punches, rail tongs, tie tongs, timber tongs and track wrenches, which conform to A. R. E. A. specifications.

Insulation—A supplement to Construction Conservation Order L-41-b, issued October 2, permits certain types of construction, using nonmetallic materials and equipment designed to insulate buildings so that fuel can be conserved, to be undertaken without specific authorization. The materials include insulation materials, air cell pipe coverings, weather stripping and storm windows and doors. No rubber, cork or metal, other than fasteners, may be used. The order also extends to the entire country the limited exceptions granted earlier to construction necessary to the conversion or substitution of heating equipment to permit use of fuel other than oil, electricity and gas. Originally this provision applied only to states in the Eastern section in which there was gasoline rationing, and to the states of Oregon and Washington. Such conversion construction must be begun prior to January 1 to come within the provisions of this exemption.

Prices

Coal—Amendment No. 21 to Maximum Price Regulation No. 120, effective October 5, provides that bituminous coal produced in District No. 1 (Eastern Pennsylvania) may be sold at regular commercial prices to railroads for use other than in locomotives. Previously, such coal, when sold to railroads for use other than in locomotives, was subject to maximum prices higher than those for locomotive fuel but below those for general commercial use. Amendment No. 22 to Maximum Price Regulation No. 120, effective September 26, authorizes mine operators, under certain conditions, to crush lump, double screened and run of the mine coal and sell this crushed coal at the maximum price for run of the mine. Previously, fine coal sold nearly always at prices below run of the mine and crushed coal was sold only at the price for the size to which it had been crushed. As a result of the increased demand for industrial sizes, there has been a surplus of domestic coal on the tracks at many mines. To the extent which this larger sized coal piles up on the mine tracks, operation at the mine is slowed down, and a difficult railroad-car situation is aggravated. Under these circumstances operators would normally meet the situation by crushing larger sizes and run of the mine coal to industrial sizes. However, this practice was discouraged under the soft coal regulation, allowing producers to sell this crushed coal only at the maximum price for the industrial sizes, which in nearly every case, is lower than the maximum prices for the larger sizes. The amendment removes these difficulties by allowing the mine operators to receive the run of the mine price for all coal crushed, after the conditions outlined in the amendment have been met.

Pipe—Maximum Price Regulation No. 230 (reusable iron and steel pipe), effective October 3, establishes dollars-and-cents maximum prices for reusable iron and steel pipe, cutting ceiling quotations back to levels of October 1-15, 1941. Previously, reusable pipe was covered by Revised Price Schedule No. 49, which provided that such pipe could in no case be sold for prices exceeding those for comparable new pipe. The prices are on a shipping-point basis, permitting a free flow of reusable pipe to any point where the need is great. Prices fixed for reusable pipe are 70 per cent of the list price of the lowest grade of new pipe having the same diameter and weight per foot. Reusable iron and steel pipe means used iron and steel pipe suitable, without further reconditioning, for use by the consumer for the purpose for which the consumer purchased it; suitable for use for any purpose for which new pipe of prime quality customarily is used; and, in addition, capable of conducting, without leakage, liquids and gases at a pressure of at least 50 lb. per sq. in. Premiums of 20 per cent on shipments of less than 40,000 lb. and of 10 per cent on shipments of 40,000 lb. or more are permitted for threaded and coupled pipe, other than oil country tubular goods, which is reconditioned to meet high specifications.

Rubber boots—Ration Order No. 6, effective September 29, froze all sales and shipments of six types of men's rubber boots and rubber work shoes to prevent a buyers' run on the stocks now on hand, and to give dealers time to take inventory. At the end of the freeze period on October 5, when rationing to customers begins, local War Price and Rationing Boards will be open to workers and company purchasing agents who need certificates entitling them to buy the rationed footwear. The regulation extends to hip-height rubber boots; over-the-knee rubber boots; all heavy short rubber boots; all lightweight short rubber boots; rubber pacs and bootees 10 in. or more in height; and rubber pacs, bootees and work shoes less than 10 in. in height.

GENERAL NEWS

Transportation Must Be Shrunk—Eastman

Railroads and customers must forego "normal practices" and conserve equipment

In two addresses in the East this week, ODT Director Joseph B. Eastman emphasized to large gatherings of representatives of shippers and railroads the determination of his office to "reduce to the extent practicable without doing more harm than good" the amount of transportation to be performed as long as the country is engaged in all-out war. "The War Production Board must be convinced that the maximum possible use is being made of existing equipment and facilities, and that excess transportation has been curtailed, before it will grant steel for new cars and locomotives," he asserted.

Speaking before 1,500 members and guests of the Traffic Club of New York on October 6, Mr. Eastman continued in this vein, saying, "To avoid any misunderstanding, let me make it plain that I believe new cars and locomotives to be essential. I shall do everything that I can to get them." Nevertheless, he added, "there are some imperfections in the record and a large variety of formidable difficulties ahead."

In discussing ODT General Order No. 18, designed to require loading freight cars to capacity to the extent that it can be done without injury to the lading, he paid tribute to the co-operation received generally from shippers in the practical application of this order when, "to say the least, the whole idea has been decidedly unpleasant for them." In explanation of the circumstances that led his office to "throw such a monkey wrench into the machinery of business and upset the long-established transportation customs around which trade has been built up," Mr. Eastman directed attention to the fact that, while there still is a small surplus of box cars, "there is no surplus of locomotives to speak of," and "the motive power of the railroads is being driven as it has never been driven before."

"Extraordinary measures of conservation" are called for, he continued, to keep commercial highway vehicles—trucks, buses, and taxicabs—in service, and such requirements excuse ODT Order No. 21, with its severe provisions and its difficult administrative problems. Much inconvenience and some cases of actual hardship will result from the application of these two orders, he acknowledged, but "we can take no chances with transportation, and it must be ready for all the unforeseen contingencies and emergencies which are likely to arise."

On October 5 Mr. Eastman addressed the Boston Conference on Distribution, pointing out ways in which those who engage in distribution can contribute to getting more work out of transportation equipment. At both Boston and New York he discussed in some detail the opportunities for reducing the demand for transportation facilities by following Germany's example in largely eliminating cross-hauling of freight. Because this is not solely a transportation matter, and because many practical difficulties enter into the situation, he explained, the WPB Transportation Committee and the ODT are co-operating in studying the problem, and meanwhile individual industries are being given opportunities to suggest and demonstrate what can be done to curb excess use of transportation facilities.

"We want their best advice," he added, "and it will be unfortunate if it becomes necessary to proceed without it." Co-operative arrangements designed to save transportation facilities that are approved by the WPB and the ODT will, he declared, be absolved for the duration by the Department of Justice.

In Boston Mr. Eastman referred briefly to the current passenger traffic situation. "The control of passenger traffic by government edict through some system of what is called rationing is a matter of extraordinary difficulty, because in the course of a year hundreds of millions of individuals are involved. There are very few things that are impossible, but I hope we shall not find it necessary to determine by actual trial whether general passenger rationing is possible. Right now that is not necessary, but the necessity may arise sooner than we think."

Following Mr. Eastman's address in New York a number of questions concerning the practical interpretation and application of revised ODT Order No. 18 were discussed by Henry F. McCarthy, director of the Division of Traffic Movement, and O. C. Castle, associate director of the Division of Railway Transport, ODT. Their remarks apparently left their hearers in little doubt that the order means exactly what is says.

"Movie" Shows Turret Lathe Operation

The Gisholt Machine Company, Madison, Wis., has completed a sound and color motion picture, "Turret Lathes—Their Operation and Use," which is designed to aid in training new machine shop employees. The subject matter covered includes a comparison of the turret lathe with other metal-working machines and detailed sequences illustrating the basic types of work done on a turret lathe and the production methods followed in each case. The film is of the 16 mm. size.

Study Board Gets Public-Aids Briefs

Railroads, truckers and other interests continue their arguments

The Board of Investigation and Research created by the Transportation Act of 1940 this week received several briefs in connection with its public-aid-to-transportation investigation which was the subject of public hearings held from June 29 until July 3. The deadline for the briefs was finally fixed for September 5; it had been postponed a couple of times after having been set originally for August 25. The briefs are available for inspection at the Board's offices, and parties deserving to file reply briefs have until October 25 to do so.

Among the parties filing this week were the Association of American Railroads; American Trucking Associations; National Council of Private Motor Truck Owners; Transportation Association of America; Dr. Charles S. Morgan, who was director of the former federal co-ordinator of transportation's section of research; American-Hawaiian Steamship Company and Luckenbach Steamship Company; and the Civic Federation of Chicago.

The A. A. R. brief, a document of 316 pages, presents in comprehensive fashion a critical appraisal of evidence brought out in the recent hearings and argues for adoption by the Board of what the carriers regard as the proper approach to the determination of public aids. Thus the brief had occasion to point out why the railroads think many conclusions reached in the co-ordinator's "Public Aids to Transportation" report "are erroneous and misleading."

In concluding the brief emphasized as "of outstanding importance" the following points:

(1) The central purpose of the Board's investigation is a study of the relative fitness and economy of railroads, water carriers, and motor carriers. This involves a consideration of relative costs of transportation by each type of carrier, including those costs borne by government through the extension of public aid. The purpose of the investigation will be defeated if the same elements of costs are not considered with respect to each type of carrier. Therefore, the same standards and measures must be employed in determining public aid to each type of carrier.

(2) Collateral benefits to lands, communities, localities, and business enterprises are brought about by the use of all agencies of transport. They should not be considered in determining the extent of public aid. The amount of public aid is not made greater or less by indirect injuries or indirect benefits.

(3) Carriers which provide their own facilities must look to the users of their services for the funds necessary to meet the costs of such facilities, as well as all other costs of operation. They cannot obtain a part of those funds by levying taxes on land owners and others who may be regarded as indirect beneficiaries. If, in the case of carriers using facilities provided by govern-

ment, indirect beneficiaries are required to pay a part of the costs of the facilities, an indefensible and chaotic competitive situation is an inevitable result.

(4) The true costs of transportation by a carrier using facilities furnished by government are not reduced by requiring indirect beneficiaries to pay a part of the costs of such transportation. The relative economy of a carrier of this kind, as compared with that of a carrier providing its own facilities, must be judged in the light of the full costs of transportation, including just compensation for facilities used.

(5) The national transportation policy has for its main objective a system of transportation in which each type of carrier occupies its proper place. That place cannot be determined unless each type of carrier is called upon to bear the full costs of the transportation service it performs, including just compensation for facilities furnished to it by government.

(6) Effectuation of this policy depends upon sound underlying conditions in the field of transportation which will encourage the movement of traffic by the most economical type of carrier rather than by a type of carrier which appears to be economical only because it is able to escape the payment of a large part of the costs incident to its operation.

(7) Currently effective aids to railroads, if any exist, are negligible.

(8) Water carriers are receiving public aids of great value. The improved waterway facilities which they use are provided by government at large cost, and the water carriers pay nothing to government in return.

(9) Highways are provided and maintained by government at an enormous cost. Almost their only use is by motor vehicles. Certain user payments are made in connection with motor vehicle use, but they are sufficient to reimburse government for only about one-half of the costs of highways. The resulting public aid to motor carriers is of tremendous value. This conclusion can be avoided only on the indefensible theory that public aids to motor carriers can be eliminated or minimized by setting off against them indirect benefits to lands and localities arising out of the use of the highways by motor vehicles. The whole nebulous concept of "local or land service use" of highways by motor vehicles springs from confusion and breeds confusion. It rests upon an attempted classification of motor vehicle use which has no foundation in logic or in realism, and it comes to the perplexing conclusion that a large part of motor vehicle use of the highways is "non-motor vehicle" use.

Among other points made by the brief in leading up to the foregoing was one to the effect that any attempt to allow for such indirect benefits as community development in the determination of public aids to carriers "would produce conjectural and unreliable results wholly without value." As noted in the *Railway Age* of September 26, page 481, the Board's annual report indicates that the Board has reached a "tentative" conclusion in accord with that point of view. Another point on which the Board's tentative conclusions, as indicated in the annual report, agree with the railroad view is that relating to the proper measure for aid to railroads involved in government loans. The railroad brief argues against a formula which would undertake to determine the difference between the interest date paid to the government and rates at which it is assumed the borrowers could have got the money elsewhere. Results of such calculations, the Board said in the annual report, "would be of very doubtful value."

Discussing the valuation of lands granted to railroads, the brief insists that "the value of a grant, by its very nature, should be measured by its value at the time the grant was made." On that basis it is calculated that annual land-grant rate deductions on the government's wartime traffic "are today not greatly less than, if indeed they are not equal to all the federal land grants."

"From September 1, 1941, to April 30, 1942, a period of eight months," the brief says, "the total reduction on government military traffic amounted to more than $60,000,000. This is at the rate of some $90,000,000 per year, and there is reason to believe that the annual rate, as of the date of this brief, exceeds $100,000,000 per year. It is clear that by the close of the present war emergency, if no relief is afforded the railroads in the meantime from the rate reduction requirements, the amount of reductions will have aggregated hundreds of millions for the war period alone." And all of this results from so-called "historical or construction aids," which, it was conceded in the co-ordinator's report, now yield "small and probably negligible" net benefits to the railroads as a whole.

The brief also suggests that non productive railroad expenditures required for public purposes by state, county or municipal governments "may be considered as credits to the railroads against public aids given them by government." In this connection reference is made to a study showing that during the five-year period 1927-1931 such non-productive capital expenditures amounted to "over $435,000,000" — $233,000,000 for changes in property, and $212,000,000 for "nonproductive" charges for maintenance and operation. This five-year total, the brief continues, "gives only a slight indication of what the amount may be for the entire period of such requirements by government."

Taking up the contention that credit should be given to waterways on account of their contribution to national defense, the brief says that this would logically require that "similar although much greater credit should be given to railroads." In that connection pronouncements of the War Department are cited to support an assertion that "no agency of transportation compares with the railroads in respect of the essential character of the service they render the nation as an arm of the military and naval establishments, both in peacetime and in wartime."

The brief's discussion of public aid to motor carriers defends findings of the study, "Highway Costs," made by C. B. Breed, professor of railway and highway transportation at Massachusetts Institute of Technology; Clifford Older, consulting engineer, and W. S. Downs, professor of railroad and highway engineering at West Virginia University; and published by the A. A. R., in 1939. As a table in the brief shows, the Breed-Older-Downs study found that highway costs during the 1921-1937 period exceeded total highway user payments by $12,798,197,000.

The American Trucking Association's brief did not care for the annual-cost basis, which includes such items as interest, depreciation, tax equivalents, etc. It preferred the annual-expenditures basis. As A. T. A. had it figured out, the highway users paid $2,500,000,000 more than a "fair" share of highway costs during the 1920-1940 period; it would disregard as "the heritage of the past" all highway outlays prior to 1920. The A. T. A. formula considers 1921-1930 as a transition period, for which a proper percentage of chargeable cost between highway users and the general public could not be determined. For this period, A. T. A. computed the public responsibility on the basis of $12 per capita for highways and $7 per capita for city streets. The balance was charged against highway users to produce a 1921-1930 user deficit of $1,431,379,000. For the 1931-1940 period, A. T. A.'s formula charges users with 50 per cent of the expenditures on highways and 30 per cent of the expenditures on city streets. That produces in favor of the users a 1931-1940 net of $4,015,701 to offset against the 1921-1930 deficit and produce the $2,500,000,000 "excess" noted above.

Thus, as A. T. A. sees it: "The plain and established facts are that the highway user is not and never was subsidized, but on the contrary has always been the greatest gold mine that the tax collectors ever worked and the Board should so find." Previously the brief had highlighted the testimony offered at the hearing by A. T. A. General Manager John V. Lawrence; while its opening comments had assailed the railroads and their employees for alleged anti-truck activities, meanwhile doing a bit of fawning on the Board.

In the latter connection, the brief recalls how the Board was set up after recommendations for some such agency had been made by President Roosevelt's Committee-of-Six. That committee, said A. T. A. "lost control" of the situation after the Transportation Act of 1940 was passed; because "we are reasonably certain that none of the present Board members appeared on the panel submitted by either the railroads or the railroad labor unions." Then, it is next charged, the Committee-of-Six, "together with all their affiliations," were "ready to abolish the Board, and one way of doing it was to cut off the appropriations." In the meantime, however, "the motor carrier industry had observed that the Board members had not been picked from the railroad slate;" and "furthermore," their qualifications and personal integrity were such that the public, the motor carrier industry and the railroads could be assured of an impartial investigation and report."

The brief of the National Council of Private Motor Truck Owners undertakes to raise doubts as to the validity of all data and other evidence which the Board has gathered or will be able to gather on the public-aids matter. It seems to reflect a hope that the Board would agree that the questions in issue have already been decided, in so far as they can be decided, by such "impartial groups" as the National Transportation Committee (the so-called Coolidge Committee), and the federal co-ordinator.

The presentation of the Transportation Association of America supplements the testimony offered at the hearing by its executive vice-president, Donald D. Conn, who highlighted the plans being developed by the Association for revamping the nation's transportation set-up by the creation 11, 14, or 17 integrated systems to render "all types of service, whether it be rail, highway, water, or air." The transition from the present set-up, the brief says, will involve "slow and cautious going." First, it will be necessary to win public favor for the idea; and then will come the framing of plans for "tentative and illustrative systems." The former must involve the removal of such "hampering legislation"

as the application of anti-trust laws to regulated carriers, and the Panama Canal Act. The set-up which the Association visualizes would avoid subsidies, "except where national defense justifies;" and it would contemplate integrated systems "strong enough to undertake research on a broad scale" and to "bear the expense of development of new facilities without having to call on the government for subsidy." The systems will be mapped out by the Association in a later brief.

Dr. Morgan's statement occupied 233 mimeographed sheets. It was filed "in a personal and not official capacity, but with the consent of the Interstate Commerce Commission and Director Eastman." It reviews "such parts of the evidence of record as seem to require comment," and includes also a review "of the engineering and other technical problems of highways and their use."

Study Board Appointment

James A. Little, director of transportation for the Nebraska State Railway Commission, has been appointed chief of the Transportation Board of Investigation and Research's Shipper-Carrier Relations Section. "The program of research with which Mr. Little will be concerned," the announcement said "involves studies of shipper-carrier organizations and the way in which they affect the economy and fitness of the national transportation system."

Freight Car Loading

Loadings of revenue freight for the week ended October 3 totaled 907,607 cars, the Association of American Railroads announced on October 8. This was an increase of 9,893 cars, or 1.1 per cent above the preceding week, a decrease of 10,289 cars, or 1.1 per cent, below the corresponding week last year, and an increase of 101,603 cars, or 12.6 per cent, above the comparable 1940 week.

As reported in last week's issue, loadings of revenue freight for the week ended September 26 totaled 897,714 cars, and the summary for that week, compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loading

For Week Ended Saturday, September 26

District	1942	1941	1940
Eastern	163,303	187,750	167,150
Allegheny	186,606	199,681	170,807
Pocahontas	56,412	59,921	56,419
Southern	127,245	128,779	115,372
Northwestern	146,412	145,713	136,622
Central Western	139,605	133,855	119,481
Southwestern	78,131	64,095	56,583
Total Western Districts	364,148	343,663	312,686
Total All Roads	897,714	919,794	822,434
Commodities			
Grain and grain products	47,948	40,480	39,392
Live stock	20,201	16,513	17,517
Coal	171,728	171,051	158,484
Coke	14,019	13,890	11,690
Forest products	50,062	46,290	40,668
Ore	78,134	71,267	67,215
Merchandise l.c.l.	89,865	160,593	158,034
Miscellaneous	425,757	399,710	329,434
September 26	897,714	919,794	822,434
September 19	903,099	907,969	813,329
September 12	814,885	914,656	804,265
September 5	887,960	797,791	695,094
August 29	899,419	912,720	768,775
Cumulative Total, 39 Weeks	32,236,179	31,267,749	26,590,040

In Canada.—Carloadings for the week ended September 26 totaled 67,833 as against 69,781 for the previous week and 68,662 cars for the corresponding week last year, according to the compilation of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Sept. 26, 1942	67,833	37,298
Sept. 19, 1942	69,781	37,663
Sept. 12, 1942	60,995	33,904
Sept. 27, 1941	68,662	31,433
Cumulative Totals for Canada:		
Sept. 26, 1942	2,490,190	1,310,870
Sept. 27, 1941	2,332,080	1,143,999
Sept. 28, 1940	2,045,270	950,099

Power Reverse Gear Orders

Following through from the Chicago conferences which Commissioner Patterson held last month with representatives of the interested railroads and labor organizations, the Interstate Commerce Commission has issued several orders extending the time within which the rule requiring the installation of power reverse gears on locomotives must be complied with.

Extensions until December 31 were granted the Chicago & North Western, Lehigh Valley, Western Pacific, Chicago, Rock Island & Pacific, Southern Pacific, Delaware & Hudson, Northern Pacific, Minnesota Western, and Minneapolis, Northfield & Southern. The Kansas City Southern got an extension until November 1.

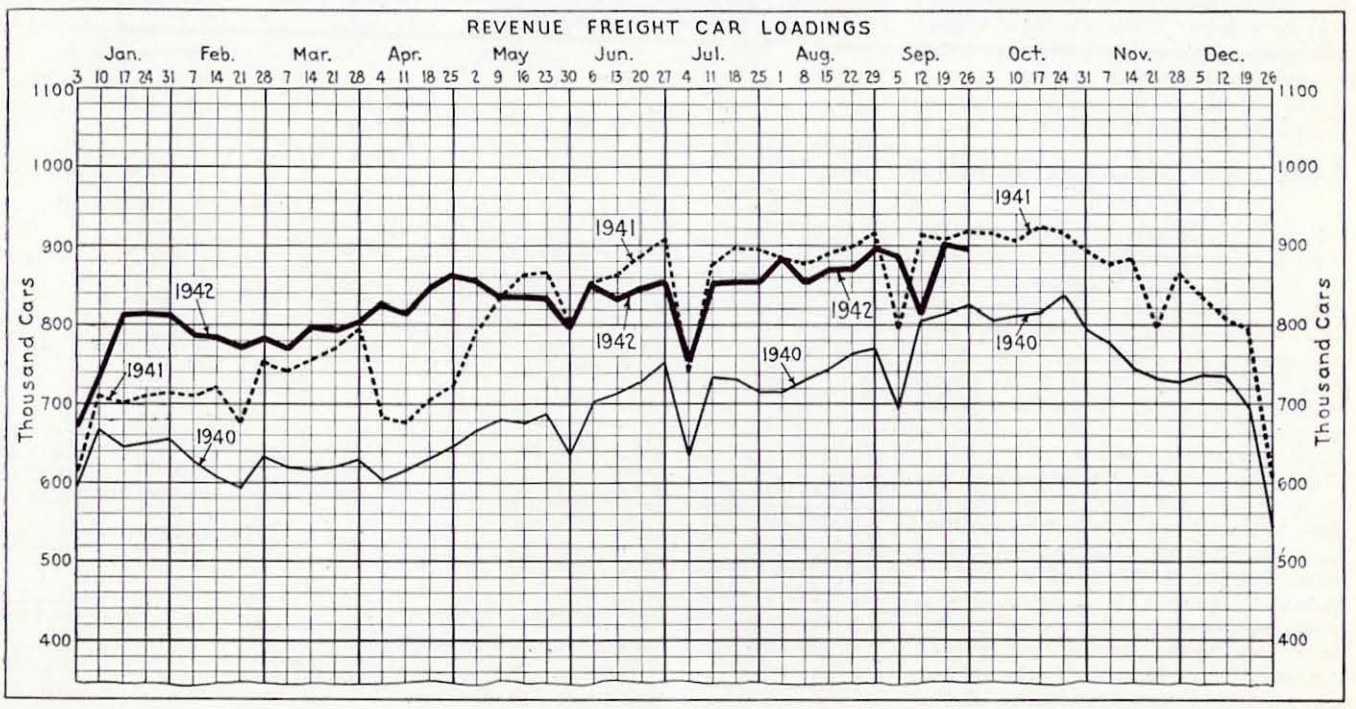
New York Commutation Fares

The Interstate Commerce Commission has overruled motions filed in the No. 28815 proceeding involving commutation fares in New York state by Price Administrator Henderson, the Public Service Commission of New York, the Transit Commission of New York, and the city of New York. OPA sought discontinuance while the others sought the same effect through a vacation of the order instituting the proceeding.

C.P.R. Reduces Tin Consumption

Consumption of tin on the Canadian Pacific has been reduced by 60 per cent so far this year, and it is expected that the proportion will be increased in the future as new substitutes are discovered. The biggest saving has been effected in bearing babbitts, it is announced, where tin content has been cut from 6.5 per cent to 1.5 per cent by the use of arsenical alloys. A copper-lead composition, containing no tin, has been substituted for the piston rod packing formerly used, which contained as much as 88.5 per cent tin, and another alloy, composed of 2.5 per cent silver and 97.5 per cent lead, is now being tested for this purpose.

In place of the 50-50 solder formerly used generally various substitutes have been developed, in which the tin content varies from 38 per cent to as little as 10



per cent. Solders high in tin content, used for electrical work, have been replaced with a silver-lead alloy containing no tin. Locomotive bells formerly were made from an alloy containing from 16 to 19 per cent tin, but a silicon bronze is now used instead. Some car and locomotive parts which contained tin have been redesigned so that sheet steel or malleable castings can be used.

Southern Fare Increase Effective

Passenger coach fares on Southern roads were increased from 1.65 cents per mile to 2.2 cents on October 1 when the Interstate Commerce Commission failed to suspend the tariffs. As noted in the *Railway Age* of September 26, page 500, the Office of Price Administration filed a petition asking that the commission suspend the increases and hold a hearing on the adjustment, which brings the Southern fares up to the basic rate in effect in other sections of the country.

Calls for More on "Interstate Commerce Acts Annotated"

The Senate on October 1 adopted Senate Resolution 270, requesting the Interstate Commerce Commission to prepare a manuscript to bring up to date the series of volumes entitled "Interstate Commerce Acts Annotated." The resolution, sponsored by Senator Tydings, Democrat of Maryland, continues the usual practice of having printed as Senate documents these volumes, prepared by and under the direction of I. C. C. Chairman Clyde B. Aitchison.

28300 and 28310 Hearing Set for November 16 at Columbus

As Chairman Aitchison indicated when he brought the Indianapolis, Ind., sessions to a sudden close on October 1, the next hearings in connection with the Interstate Commerce Commission's Nos. 28300 and 28310 investigations of the class rate structure and consolidated freight classification will be held on November 16 at Columbus, Ohio. The official notice was issued by the commission this week.

The Indianapolis sessions were reported in last week's issue, page 534.

Eastern Oil Movement Down 2.5 Per Cent

Tank car shipments of oil into the East coast area averaged 835,530 barrels daily for the week ended September 26, a decrease of 21,180 barrels or 2.5 per cent below the preceding week's all-time high, according to Petroleum Coordinator Ickes. The 39 oil shippers involved loaded a total of 27,851 cars, which, on the basis of 210 barrels per car, carried a total of 5,848,710 barrels during the week.

Commendation for "every part of the transportation industry" for the progress made in the delivery of petroleum products was included in an additional report submitted recently to the Senate by Senator Maloney, Democrat of Connecticut, who is chairman of the Senate's special committee to investigate gasoline and fuel oil shortages. The report dealt with railway transportation of petroleum, listing various steps taken by carriers and shippers, such as trainload movements, block-billing of empties, elimination of circuitious routes, concentration-point operations, and seven-days-a-week work on loading and unloading. Because of "the excellent progress and cooperation by all interests concerned," the committee made the present report the conclusion of its study of tank car equipment and traffic.

Annual Meeting of National Association of Advisory Boards

Representatives of the government, the railroads and shippers will appear on the program of the sixth annual meeting of the National Association of Shippers Advisory Boards to be held at Chicago on October 16. Government officers who will address the business session include Joseph B. Eastman, director of the Office of Defense Transportation; Col. J. Munroe Johnson, a commissioner of the Interstate Commerce Commission; and Col. William J. Williamson, chief of the Traffic Control division of the Army Transportation corps. Railroad men, all of the Association of American Railroads, who will appear on the program include John J. Pelley, president who will speak at a luncheon; M. J. Gormley, executive assistant; R. V. Fletcher, vice-president; Warren C. Kendall, chairman of the Car Service division; and C. H. Dietrick, executive vice-chairman of the Freight Claim division. Shipper representatives who will speak include Col. A. B. Barber, manager of the Transportation and Communication department of the United States Chamber of Commerce; W. B. Shepherd, assistant general traffic manager of the Aluminum Company of America; Charles Donley, president of the Charles Donley Shipping Agency; William H. Day, manager of the Transportation department of the Boston Chamber of Commerce; A. H. Schwietert, traffic director of the Chicago Association of Commerce; and George H. Shafer, general traffic manager of the Weyerhaeuser Sales Company.

A round-table discussion will be held on the afternoon of October 15, in which V. V. Boatner, director of the Railway Trans-

SELECTED INCOME AND BALANCE-SHEET ITEMS OF CLASS I STEAM RAILWAYS IN UNITED STATES

Compiled from 132 Reports (Form IBS) Representing 136 Steam Railways
(Switching and Terminal Companies Not Included)

Income Items	All Class I Railways: For the month of July 1942	For the month of July 1941	For the seven months of 1942	For the seven months of 1941
1. Net railway operating income	$133,001,367	$106,381,899	$681,512,253	$540,203,907
2. Other income	14,168,416	14,729,425	88,214,415	86,712,200
3. Total income	147,169,783	121,111,324	769,726,668	626,916,107
4. Miscellaneous deductions from income	2,112,988	2,335,475	17,528,920	16,327,032
5. Income available for fixed charges	145,056,795	118,775,849	752,197,748	610,589,075
6. Fixed charges:				
6-01. Rent for leased roads and equipment	16,300,644	14,219,918	100,793,931	91,772,653
6-02. Interest deductions[1]	36,776,738	38,802,761	258,906,284	269,868,255
6-03. Other deductions	117,426	118,214	823,075	830,877
6-04. Total fixed charges	53,194,808	53,140,893	360,523,290	362,471,785
7. Income after fixed charges	91,861,987	65,634,956	391,674,458	248,117,290
8. Contingent charges	2,230,126	1,547,287	15,717,618	10,798,002
9. Net income	89,631,861	64,087,669	375,956,840	237,319,288
10. Depreciation (Way and structures and Equipment)	20,809,948	18,114,542	138,155,963	125,392,388
11. Amortization of defense projects	7,401,888	22,571	41,033,556	28,187
12. Federal income taxes	87,619,773	24,161,407	368,490,434	92,806,184
13. Dividend appropriations:				
13-01. On common stock	4,875,857	6,119,168	55,785,466	59,204,726
13-02. On preferred stock	780,978	764,781	14,083,875	12,071,454
Ratio of income to fixed charges (Item 5 ÷ 6-04)	2.73	2.24	2.09	1.68

Selected Asset and Liability Items	All Class I Railways: Balance at end of July 1942	Balance at end of July 1941
20. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707)	$490,500,898	$558,281,940
21. Cash	875,985,427	763,819,262
22. Temporary cash investments	255,566,659	86,336,350
23. Special deposits	140,510,600	191,715,900
24. Loans and bills receivable	1,024,848	1,223,479
25. Traffic and car-service balances—Dr.	41,319,219	35,779,443
26. Net balance receivable from agents and conductors	119,971,763	73,221,703
27. Miscellaneous accounts receivable	328,676,844	152,425,797
28. Materials and supplies	534,913,181	386,581,178
29. Interest and dividends receivable	17,029,968	13,702,797
30. Rents receivable	1,114,823	1,056,715
31. Other current assets	11,064,631	8,872,194
32. Total current assets (items 21 to 31)	2,327,177,963	1,714,734,818
40. Funded debt maturing within 6 months[2]	103,953,232	71,038,671
41. Loans and bills payable[3]	32,790,600	71,360,276
42. Traffic and car-service balances—Cr.	90,120,183	58,624,130
43. Audited accounts and wages payable	304,178,716	260,292,340
44. Miscellaneous accounts payable	64,624,813	52,325,673
45. Interest matured unpaid	35,296,892	26,814,301
46. Dividends matured unpaid	5,599,739	7,673,522
47. Unmatured interest accrued	73,782,111	72,791,772
48. Unmatured dividends declared	9,118,497	4,680,685
49. Unmatured rents accrued	18,118,873	18,601,798
50. Accrued tax liability	690,921,793	325,734,216
51. Other current liabilities	55,893,599	40,261,417
52. Total current liabilities (items 41 to 51)	1,380,445,816	939,160,130
53. Analysis of accrued tax liability:		
53-01. U. S. Government taxes	553,673,998	190,010,789
53-02. Other than U. S. Government taxes	137,247,795	135,723,427

[1] Represents accruals, including the amount in default.
[2] Includes payments of principal of long-term debt (other than long-term debt in default) which will become due within six months after close of month of report.
[3] Includes obligations which mature not more than 2 years after date of issue.

NET INCOME OF LARGE STEAM RAILWAYS

(Switching and Terminal Companies Not Included)

Name of railway	Net Income After Depreciation and Amortization of Defense Projects — For the Seven Months of 1942	1941	Net Income Before Depreciation and Amortization of Defense Projects — For the Seven Months of 1942	1941
Alton	$1,276,743	* $22,741	$1,442,310	$137,115
Atchison, Topeka & Santa Fe[3]	30,033,289	13,258,704	38,908,401	20,385,153
Atlantic Coast Line	12,006,459	6,923,768	14,823,134	8,310,512
Baltimore & Ohio	15,890,849	11,489,256	22,243,564	15,877,471
Boston & Maine	4,416,675	4,003,099	5,551,303	4,831,353
Central of Georgia[2]	1,592,091	474,282	2,273,455	979,881
Central of New Jersey[2]	1,722,898	* 227,438	2,543,948	541,666
Chesapeake & Ohio	14,154,725	18,837,273	20,377,279	23,855,267
Chicago & Eastern Illinois	1,147,422	951,006	1,512,257	1,311,623
Chicago & North Western[2]	3,197,461	549,927	7,106,401	3,364,981
Chicago, Burlington & Quincy	9,386,911	4,870,002	13,444,876	8,126,555
Chicago Great Western	813,871	809,369	1,152,838	1,139,758
Chicago, Milwaukee, St. Paul & Pacific[2]	3,113,678	1,350,462	8,773,976	4,882,598
Chicago, Rock Island & Pacific[2]	8,470,214	2,862,757	11,045,715	5,405,770
Chicago, St. Paul, Minneapolis & Omaha	* 225,934	* 754,163	132,695	* 441,804
Delaware & Hudson	2,715,304	2,037,275	3,924,140	2,705,354
Delaware, Lackawanna & Western	2,464,070	2,297,511	4,642,308	3,740,199
Denver & Rio Grande Western[2]	3,867,275	* 2,573,099	5,055,831	* 1,802,267
Duluth, Missabe & Iron Range	2,693,185	6,980,211	3,563,423	7,495,763
Elgin, Joliet & Eastern	1,180,586	3,622,148	2,944,324	4,349,245
Erie	7,472,737	4,435,217	11,422,966	6,601,519
Grand Trunk Western	* 199,399	1,537,255	606,540	2,218,732
Great Northern	8,541,326	6,901,507	13,441,608	9,440,386
Gulf, Mobile & Ohio	1,794,302	1,159,417	2,382,171	1,656,964
Illinois Central	5,591,693	5,420,423	10,464,230	9,323,850
Lehigh Valley	2,151,803	2,047,208	4,497,686	3,201,796
Long Island	143,450	* 480,264	1,394,917	436,730
Louisville & Nashville	6,817,219	8,971,804	11,083,784	11,589,627
Minneapolis, St. Paul & Sault Ste. Marie[2]	* 2,803,567	* 3,015,261	* 1,540,984	* 2,270,000
Missouri-Kansas-Texas	1,663,430	* 570,991	2,328,964	101,761
Missouri Pacific[2]	14,942,539	831,330	17,848,158	3,460,430
New York Central[4]	22,251,728	15,203,624	36,116,983	25,820,382
New York, Chicago & St. Louis	4,574,868	5,024,156	5,981,972	6,000,061
New York, New Haven & Hartford[2]	9,344,842	2,675,701	11,877,138	4,612,227
Norfolk & Western	11,128,240	17,513,356	18,142,307	21,379,466
Northern Pacific	4,211,807	1,609,881	9,457,737	3,819,749
Pennsylvania	33,796,176	26,365,763	54,295,436	43,005,123
Pere Marquette	1,498,422	2,151,293	3,281,313	3,512,583
Pittsburgh & Lake Erie	2,246,510	3,323,009	4,114,509	4,742,068
Reading	7,112,575	5,047,970	9,977,530	6,819,455
St. Louis-San Francisco[2]	3,387,351	* 1,018,760	5,156,704	735,056
St. Louis, San Francisco & Texas	340,442	31,497	340,442	31,497
St. Louis Southwestern[2]	3,840,509	1,749,885	4,257,786	2,133,971
Seaboard Air Line[1]	11,029,096	829,516	12,522,224	2,256,068
Southern	12,855,366	9,334,136	18,315,902	11,555,037
Southern Pacific[5]	32,249,105	19,053,739	42,263,663	23,779,091
Texas & Pacific	3,534,003	1,576,208	4,301,214	2,316,538
Union Pacific R. R. (including leased lines)	19,589,715	7,957,904	25,797,969	12,734,361
Wabash	2,962,773	1,350,965	4,829,104	2,617,202
Yazoo & Mississippi Valley	5,674,623	680,343	6,001,389	999,366

[1] Report of receiver or receivers.
[2] Report of trustee or trustees.
[3] Includes Atchison, Topeka & Santa Fe, Gulf, Colorado & Santa Fe, and Panhandle & Santa Fe.
[4] Includes Boston & Albany, lessor to New York Central.
[5] Includes Southern Pacific Company, Texas & New Orleans, and leased lines. The report contains the following information: "Figures reported for Southern Pacific Transportation System exclude offsetting debits and credits for interest on funded securities and rentals for leased properties between companies included therein. Operations for 1942 of separately operated Solely Controlled Affiliated Companies (excluding results for Southern Pacific Railroad Company of Mexico), not included in income results for the System, resulted in a net income of $243,846 for the month and $157,339 for the period. These results include $195,552 for the month and $1,368,965 for the period representing interest on bonds of such companies owned by Southern Pacific Company not taken into income by S. P. Co. and therefore, not included in the 1942 income results for the System. The combined results for 1942 for Southern Pacific Transportation System and separately operated Solely Controlled Affiliated Companies (excluding S. P. RR. Co. of Mexico) amounted to a net income of $6,948,276 for the month and $33,775,409 for the period. Figures herein given exclude results of S. P. RR. Co. of Mexico for the reason that policy was adopted January 1, 1940 of making no further advances to that company, it being required to conduct its operations entirely within its own resources."

* Deficit.

Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission. Subject to revision.

port division of the Office of Defense Transportation; Henry F. McCarthy, director of the Traffic Movement division of the Office of Defense Transportation; Homer C. King, director of the Bureau of Service of the Interstate Commerce Commission; and Warren C. Kendall will participate.

Club Meetings

The New England Railroad Club will be addressed by W. C. Kendall, chairman of the Car Service Division of the Association of American Railroads, on the subject Handling of Wartime Traffic, at a meeting at the Hotel Touraine, Boston, Mass., on October 13. A dinner, beginning at 6:30 p. m., will precede the address.

At a meeting on October 12, preceded by a dinner at 6:30 p. m. at the Benjamin Franklin Hotel, Philadelphia, Pa., the Traffic Club of Philadelphia will have as its guest speaker Lieutenant F. D. G. Challis of the British Royal Navy.

P. D. Blanchard, service engineer of the Superheater Co., will discuss Production and Utilization of Superheated Steam at a meeting of the Northwest Locomotive Association to be held at 8 p. m., October 19, at Woodruff Hall, St. Paul, Minn.

Officers for the coming year will be elected and installed at a meeting of the Car Foremen's Association of Chicago, to be held at 8 p. m., October 12 at the Hotel LaSalle, Chicago.

Transportation of Explosives and Other Dangerous Articles during the War will be the subject of an address by W. S. Topping, chief inspector of the A. A. R. Bureau of Explosives, to be given at 8 p. m. on October 20 at a meeting of the Car Department Association of St. Louis at the Hotel De Soto, St. Louis, Mo. Dinner and entertainment, beginning at 5:45 p. m., will precede the address.

Congress Reenacts "Chandler" Act

Congressional action on H. R. 7121, which reenacts chapter XV of the Bankruptcy Act providing for voluntary reorganizations of railroads was completed on October 6 when the House of Representatives accepted the Senate amendment limiting the measure's application to proceedings initiated on or before November 1, 1945. The bill, which was this time sponsored by Representative McLaughlin, Democrat of Nebraska, was passed by the Senate on October 1.

Illinois Commission Starts Abandonment Inquiry

An inquiry into the events leading to the War Production Board's order requisitioning all rails, metal bridges and electric wires along 155 miles of the lines of the Illinois Terminal Railroad, was started by the Illinois Commerce Commission on October 6. The WPB order was issued just as the state commission had refused to grant the petition of the railroad which sought permission to abandon the lines. A. P. Titus, president of the road, was requested to appear on October 7.

Pittsburgh Club Nominates

The Railway Club of Pittsburgh has announced nominees for election at the next meeting of the club as follows: for president, R. C. McIntyre, general manager, Union Railway, to succeed C. J. Graham; for first vice president, H. H. Haupt, general superintendent motive power, central region, Pennsylvania; for second vice president, Thomas F. Sheridan, chief clerk to superintendent motive power, Pittsburgh & Lake Erie. J. D. Conway has been nominated for re-election as secretary.

British Freight Embargo Hits One Entire Industry

For the first time during the present war the British Minister of War Transport has banned the transportation by rail of the product of an entire industry, the September Trade & Engineering Supplement of the London Times reports. The embargo applies to cut flowers, decorative foliage and plants, and becomes effective November 1. In normal times, and even in 1941, it is stated, this traffic has required "several hundreds of special trains," as well as a large number of specially fitted cars, and the order has been issued to release the equipment so employed to help the railroads meet the expected heavy winter traffic in coal, war materials and essential civilian supplies.

Because a precedent is established by this order which may have serious effects later on British trade and railway operations, it was issued, the announcement states, only after approval by the highest government authorities. Freight traffic in

Britain continues to increase, but except in rare instances it moves very smoothly. Passenger trains, however, have been more crowded than ever during the summer, and traveling has been more uncomfortable, the same source points out, but no further reductions or restrictions affecting passenger operations have been announced recently, apparently because it is felt that the discomforts of travel and the continuous output of "stay at home" publicity will hold the volume of passenger movement within bounds.

Western Executives Ponder Decelerating Trains

The lengthening of freight and passenger train schedules as a means of increasing utilization of railroad facilities was discussed by the Western Association of Railway Executives and representatives of the Office of Defense Transportation at Chicago, on October 5. The lengthening of schedules, requested by the ODT, was referred to the association's Schedule committee for study, following which the subject will be given further consideration by the Western lines. A freight schedule of eight days instead of the present seven days between Chicago and the Pacific coast and more revenue stops in passenger schedules were considered.

$2,700 Judgment Against North Western

The Interstate Commerce Commission has been advised that on October 5, in the United States Court for the Northern District of Illinois at Chicago, a judgment in the sum of $2,700 was entered against Charles M. Thomson as trustee of the Chicago and North Western Ry. in a civil suit brought by the United States for a penalty arising out of the failure of the carrier to comply with the commission's Service Order No. 71.

The suit, the commission's announcement said, charged 18 violations of that order by reason of action of the carrier in furnishing single-deck livestock cars in lieu of double-deck livestock cars which had been ordered by Armour & Company for shipments of hogs from Green Bay, Wis. to Chicago.

Seek Reconsideration of Southern Livestock Rate Decision

Official and Southern territory railroads have asked the Interstate Commerce Commission to postpone, until they can prepare a petition for reconsideration, the effective date of its recent order prescribing a new rate structure and transit arrangements on livestock to and from the South. That order was in I. & S. No. 4779, and the commission's report was reviewed in the *Railway Age* of September 5, page 381.

The petitioning railroads asked for a postponement of the effective date from December 1 until February 1, 1943, and for a December 1 deadline for the filing of their petition for reconsideration. Among other things, the carriers want to prepare a traffic study for 1941 to show losses in revenue which would result from the adjustment. "The drastic nature of the reductions required in rates shown to be unconscionably low," the present petition said, "justifies the hope that said reductions were made under the erroneous impression that the increase granted in stocker and short-haul rates would in a measure compensate the carriers for the reductions."

Purchasing Officers Sought by U. S. Civil Service

Purchasing officers qualified by experience to prepare specifications for the purchase of government supplies, draft invitations for bids, and to keep posted on market trends, sources of supply, and regulations and laws affecting government procurement activities are "imperatively" needed, the U.S. Civil Service announces. Positions available pay from $2000 to $4600 a year. No age limits have been set, and no written tests are required of candidates who have had from two to six years' experience in purchasing large lots of material of considerable variety. Experience with large industries, public utilities or railroads is preferred. Details and application forms are available from the Civil Service Commission, Washington, D. C., and from first-class and second-class post offices.

I.C.C. Names Agents to Handle Soybean Movement

Nine additional permit agents, who will handle the soybean movement, have been designated by the Interstate Commerce Commission in an October 3 amendment to Service Order No. 80 which was originally issued last July to set up a permit system for handling the 1942 grain crop. The nine new agents, some exercising jurisdiction at more than one point, will control the soybean movement at the following markets: Decatur, Ill., Springfield, Taylorville, Bloomington, Champaign, Gibson City, Peoria, Quincy, Monmouth, Pekin, Galesburg, Cairo, Cedar Rapids, Iowa, Clinton, Waterloo, Fayette, Gladbrook, Des Moines, Iowa Falls, Fort Dodge, Quimby, Centerville, Sioux City, St. Joseph, Mo., Decatur, Ind., Fostoria, Ohio, Marion, New Washington, Toledo, Painesville, Shelby, Wooster, Berea, Columbus, Milwaukee, Wis., Detroit, Mich., and Dearborn.

Also, the amendment extends the jurisdiction of the commission's existing permit agents at Louisville, Ky., Indianapolis, Ind., Cincinnati, Ohio, and Buffalo, N. Y., to cover the movement of soybeans to additional points in the vicinity of those markets as follows: Owensboro, Ky., Henderson, Windfall, Ind., Lafayette, Marion, Ivorydale, Ohio, Circleville, Buffalo, N. Y., and Oswego.

Loss and Damage Outlay Up

Freight loss and damage payments made by 128 railroads in the United States and Canada during the first six months of 1942 increased 46.4 per cent as compared with the same period of 1941, according to a summary issued by the Freight Claim division of the Operations and Maintenance department of the Association of American Railroads. The increase amounted to $4,935,867, the payments aggregating $15,572,717 and $10,636,850 in the respective periods. The increase was of greater ratio than the freight revenues with the result that the ratio of loss and damage payments to revenue of United States carriers increased to 0.56 per cent in the first half of 1942, compared with 0.51 per cent in the first half of 1941.

Payments for unlocated damage increased $2,547,391; for concealed loss and damage, $988,228; and for unlocated loss, $66,568, during the first half of 1942, compared with the same period of 1941. Payments for loss and damage to fresh fruits, melons and vegetables totaled $2,376,366 in the first six months of 1942, compared with $1,940,168 in the same period of 1941, an increase of 22.5 per cent.

Representation of Employees

Results of recent elections in representation-of-employees disputes have been made public by the National Mediation Board. One involved Erie road conductors whom the Brotherhood of Railroad Trainmen took away from the Order of Railway Conductors by a vote of 310 to 195.

The B. of R. T. also won the right to represent yardmen (conductors or foremen, brakemen or helpers) on the Patapsco & Back Rivers, while the engineers, firemen, hostlers and hostler helpers on that road chose the Brotherhood of Locomotive Firemen and Enginemen. On the Maine Central, the Brotherhood of Railroad Shop Crafts of America successfully met a challenge from the Brotherhood of Railway Carmen of America and retained the right to represent carmen (including coach cleaners), their helpers and apprentices.

On the Chicago, Aurora & Elgin, the Brotherhood of Locomotive Firemen and Enginemen supplanted the Amalgamated Association of Street, Electric Railway and Motor Coach Employees of America as the representative of hostling-switchmen. The Brotherhood of Railway Clerks extended its coverage of Central of Georgia employees to include office, station, storehouse, dock and pier watchmen. Dismissed without prejudice was an application filed by the Brotherhood of Trainmen, Brakemen, Porters, Switchmen, Firemen and Railway Employees, Inc., which invoked the Board's services to settle an alleged dispute as to who may represent Missouri Pacific passenger train porters, now represented by the Brotherhood of Sleeping Car Porters. The Board's action was based on its finding that authorization cards which had been signed in favor of the "Brotherhood of Trainmen, Brakemen and Porters" and protested by the B. of S. C. P., "do not properly support the application."

I.C. Changes Long-Distance Passenger Train Schedules

Major changes in long-distance passenger train schedules and services to fit war time conditions will be placed in effect by the Illinois Central on October 18. Through travel in sleeping cars between Chicago and New Orleans, La., and between St. Louis, Mo., and New Orleans will be diverted to the Panama Limited, and the extra fare on this train will be discontinued.

The Creole and the Louisiane will provide coach service between Chicago and

New Orleans and the usual system connections. In addition, sleeping cars will be operated on the Creole between Louisville, Ky., Memphis, Tenn., and New Orleans and on the Louisiane between Chicago, Memphis and Hot Springs, Ark., also southward from Cincinnati, Louisville and Memphis to New Orleans and northward from Gulfport to Chicago.

Schedules will be lengthened on all long-distance passenger trains except the Panama Limited (Chicago and New Orleans), the Green Diamond (Chicago and St. Louis) and the City of Miami (Chicago and Miami). The schedules to be lengthened include those of the Creole and the Louisiane between Chicago-St. Louis and New Orleans and between Louisville and New Orleans, the Daylight and the Night Diamond between Chicago and St. Louis, the Seminole between Chicago and Birmingham, Ala., the Illini between Chicago and Carbondale, Ill., the local between Chicago and Champaign, Ill., the Hawkeye and the Iowan between Chicago and Sioux City, Ia., the Land O' Corn between Chicago and Waterloo, Ia., the Sinissippi between Chicago and Freeport, Ill., the Chickasaw between St. Louis and Memphis, the Planter between Memphis and New Orleans, and the Delta between Memphis and Greenville, Miss.

Bill Would Set Up Congressional Agency on Post-War Planning

Representative Dirksen, Republican of Illinois, has introduced House Concurrent Resolution 84 which would create a Joint [Congressional] Committee on Planning and Reconstruction and establish as an adjunct thereto a Congressional Planning and Reconstruction Service, "exclusively and directly responsible to the Congress." The joint committee could consist of 11 members of the House and 11 members of the Senate, appointed in turn by the Speaker and the President of the Senate; while the planning and reconstruction service, under the supervision of the joint committee, would be headed by a $10,000-a-year director who would have a $9,000-a-year assistant.

The resolution would authorize an annual appropriation of $1,000,000 for carrying on the committee work of "more effectively" planning for post-war reconstruction by looking into such matters as relief and public works, highways, public and private housing, public power, community development, airports, and relief and work relief labor problems.

Another post-war measure recently introduced is H. R. 7601, a super-highway bill sponsored by Representative Wene, Democrat of New Jersey. The bill calls for a new system of super-highways to be financed by a $10,000,000,000 bond issue and made "self-liquidating" and "self-sustaining" by a system of tolls. The planning and construction of the system would be carried out by a Director of Superhighways, subject to the approval of a seven-member commission.

The director would be ordered by the bill to "take immediately whatever steps may be necessary to have plans and specifications prepared, locations determined, and right-of-way secured so that when the World War, in which the Nation is now engaged, has ended and munitions plants are closed and men in the armed forces are being mustered out of service, remunerative jobs will be provided for every able-bodied American citizen then out of employment."

Senate Gets Tax Bill

The Senate this week was considering its committee on finance's version of H.R. 7378, the new tax bill, which was reported by the Committee on October 2.

The Senate bill eliminates the House version's proposed five per cent tax on amounts paid for the transportation of property, but retains the increase from the present five per cent rate to 10 per cent in the tax on amounts paid for passenger transportation and sleeping or seating accommodations. In the latter connection, however, the Senate committee would extend to members of the military forces of any of the United Nations the exemption enjoyed by members of United States armed forces traveling on furlough at their own expense. The proposed freight tax was eliminated by the Senate committee when the Office of Price Administration advised that it would "add greatly to the cost of production and handling of food and other necessaries, which would be reflected in higher prices for the articles, and for that reason would aid inflation."

With respect to that provision of the present law permitting corporations to purchase their own securities at a discount without being taxed on the paper profits involved, the Senate committee eliminated the condition, requiring such corporations to obtain from appropriate government agencies certificates stipulating that they are in unsound financial condition. Otherwise, the committee accepted the House version of the provision, i.e., extending its expiration date to cover taxable years beginning before January 1, 1946.

Because the question of whether railroad reorganizations constitute tax-free reorganizations for income-tax purposes "has caused considerable concern," the Senate bill provides that "in the case of such reorganizations beginning after December 31, 1939, the basis of the property of the old corporation shall not be reduced if the transfer of the property is in pursuance of an order of a court having jurisdiction of such corporation in a receivership proceeding or in a proceeding under section 77 of the National Bankruptcy Act." In other words, the new corporation would have the same property base for income-tax purposes as its predecessor.

Railroads Can't Be Too Fussy About Contract Truckers

The rule of *Kansas City S. Transport Co., Inc., Com. Car Application,* 28 M. C. C. 5, to the effect that a railroad desiring to perform highway freight operations itself or through a subsidiary should not be forced instead to enter arrangements with independent truckers is not broad enough to embrace a situation wherein an independent, in undertaking to carry out its contract with a railroad, proposes to launch a new operation on routes already adequately served. Such is the basis for the adverse decision by the Interstate Commerce Commission's Division 5 in the proceeding involving the application of J. V. McNicholas Transfer Company for a certificate of convenience and necessity, authorizing operations in substituted freight service for the Pennsylvania between Youngstown, Ohio, on the one hand, and, on the other, Louisville, North Jackson, and Ravenna.

The applicant is already serving the Pennsylvania in pick-up and delivery operations, and it proposed that the certificate sought should be subject to the usual conditions designed to insure that highway services of railroads remain auxiliary to railroad service. Moreover, the commission conceded that "the proposed substituted service is in the public interest and that the applicant is fit, willing, and able properly to perform it." Nevertheless, it heeded the call of protestants, who were found to have available space in their equipment to handle the railroad traffic involved.

With respect to the applicant's reliance on the rule of the K. C. S. case, and the contention that the railroad "should be permitted to select a carrier in which it has confidence and which has been serving it," the commission had this to say: "In the case cited, applicants were either the railroads themselves or their motor carrier subsidiaries. Authority was granted to applicants because, as the commission found, the co-ordinated service through the voluntary co-operation of all or some of the existing carriers would not be practicable and the useful public purpose which the proposed operations of applicants would serve could not be achieved effectively through the use of existing facilities. Here applicant and protestant are independent motor carriers and there is no showing that the service cannot be performed as well by protestant as by applicant." The dissent of Commissioner Mahaffie is noted, and thus the majority report represents the view of Commissioners Rogers and Patterson. The proceeding is docketed as No. MC-14552 (Sub-No. 1).

Railway and Supply Men Win Welding Awards

Twenty-two engineers, designers, supervisors and welders of railroads and supply companies are the winners of 18 awards in the $200,000 Industrial Progress Award Program which the James F. Lincoln Arc Welding Foundation, Cleveland, Ohio, has been conducting during the last 2½ years. All together 408 awards were made to 458 recipients who submitted reports of welding progress. The foundation was founded in 1936 in honor of James F. Lincoln, president of the Lincoln Electric Company by the company's board of directors.

The winners of the railway awards, the amounts, and the subjects of their papers are as follows:

J. E. Candlin, Jr., assistant engineer and A. M. Unger, plant engineer, of the Pullman-Standard Car Manufacturing Company, Chicago, $3,700. Major consideration in the applications of welding to railroad passenger cars since 1936.

H. Malcolm Priest, engineer of the U. S. Steel

Corporation subsidiaries, Pittsburgh, Pa., $2,700. Welding 250-ton flat cars.

John H. Hruska, chief inspector of the Electro-Motive Division of General Motors Corporation, LaGrange, Ill., $1,700. Problems in the construction of an all-welded 5,400 H. P. Diesel-electric freight locomotive.

A. L. Bartlett, engineer of the New York, New Haven and Hartford, New Haven, Conn., and H. S. George, president of the Rail Maintenance Corporation, New York, $1500. An arc welding process for building up battered rail ends.

John F. Muller, sales engineer and Gonzalo C. Munoz, secretary-treasurer, of the American Pulley Company, Philadelphia, Pa., $1,300. A method of suspending the compressor of a railroad car air-conditioning system.

Cyril Henry Easun, assistant mechanical engineer, Shop Methods, Central region of the Canadian National, Toronto, Ont., $700. Tire failures on fast passenger and freight locomotives.

Paul E. McKamy, industrial locomotive designer of the Whitcomb Locomotive Company, Rochelle, Ill., $500. The substitution of an all-welded locomotive truck frame for a steel casting.

John Dewar Seivewright, welding supervisor of the Central region of the Canadian National, Toronto, Ont., $500. Railroad brake shoe castings.

Carl Ray Averitt, assistant blacksmith foreman of the Illinois Central, Paducah Shops, Paducah, Ky., $500. Fabrication of a steam locomotive cylinder.

Walter E. Barron, foreman in charge of welding of the Heisler Locomotive Works, Erie, Pa., $250. The construction of a "fireless" locomotive.

Clifford A. Salk, carman and Ray F. Theisen, welder of the Great Northern, St. Cloud Shops, St. Cloud, Minn., $250. The conversion of tenders into tank cars.

John P. Roger, plant engineer of the Babcock and Wilcox Company, Barberton, Ohio, $150. Welding applications to parts of a locomotive boiler.

Adario R. Daniels in charge of truck maintenance of the Philadelphia & Western, Norristown, Pa., $150. Welding wheel flanges and other parts on an electric railroad.

Jesse F. Holloway, designer of the Car, Truck and Diesel Locomotive division of the Baldwin Locomotive Works, Eddystone, Pa., $100.

C. O. Beck, supervisor of power and distribution of the Cleveland Union Terminals, Cleveland, Ohio, $100.

J. J. Laudig, research engineer of the Delaware, Lackawanna & Western, Scranton, Pa., $100.

A. M. Knowles, assistant engineer of structures of the Erie, Cleveland, Ohio, $100.

Felix S. Hales, bridge engineer of the New York, Chicago & St. Louis, Cleveland, Ohio, $100.

Walter R. Roof, engineer of bridges and buildings of the Chicago Great Western, Chicago, $100.

Engine Wage Mediation Fails

Mediation of the demands of enginemen and those of firemen for a new basis for computing wages on Western lines, which were begun at Chicago on September 22 have failed, it was announced on October 7, by George A. Cook, chairman of the National Mediation Board, who has been mediating the dispute of the firemen, and by David J. Lewis, a member of the Board who has been hearing the demands of the enginemen. Both mediators asked the parties to submit their disputes to arbitration. At the time of going to press, none of the parties had accepted arbitration.

Uncertainty as to what course the dispute will take exists as a result of President Roosevelt's order of October 3, which gives the National War Labor Board jurisdiction over all wage disputes. Should this board take jurisdiction, its procedure will not follow the provision of the Railway Labor Act and its decision will be final and binding. At the same time it was not clear whether the Executive Order intended to remove the jurisdiction of the National Railway Labor panel which the President created on May 21, whereby labor-management disputes in the railroad industry may be submitted to emergency fact-finding boards without the necessity for the taking of a strike vote.

Operating Earnings of Mexican Railways Down

Operating revenues of the National Railways of Mexico increased from $15,403,262 in July, 1941, to $17,081,590 in July, 1942, but operating expenses, following a 10 per cent increase in wages, increased from $12,089,007 to $14,614,105, with the result that operating earnings were only $2,467,485 in July, 1942, as compared with $3,314,255 in July, 1941.

September Export Traffic

Cars of export freight other than grain or coal unloaded at Atlantic, Gulf and Pacific ports in September totaled 76,574 cars compared with 56,249 in September 1941, according to the Association of American Railroads. Cars of grain for export unloaded in September at these ports totaled 1,559 cars compared with 3,587 in the same month last year.

"This traffic is being handled with no serious congestion, due to the continued cooperation of all concerned, particularly the steamship lines, exporters and shippers," the Association of American Railroads said.

Equipment and Supplies

IRON & STEEL

THE PITTSBURGH & WEST VIRGINIA has placed an order for 1,330 gross tons of steel rail with the Carnegie-Illinois Steel Corporation.

MOTOR VEHICLES

THE RIO GRANDE MOTOR WAY, INC., which affords co-ordinated bus service with the Denver & Rio Grande Western, has received delivery of two 37-passenger intercity-type motor coaches from the a. c. f. Motors Company.

THE DENVER-COLORADO SPRINGS-PUEBLO MOTOR WAY, INC., which affords co-ordinated bus service with the Chicago, Burlington & Quincy and the Denver & Rio Grande Western, has received delivery of two 37-passenger intercity-type motor coaches from the a. c. f. Motors Company.

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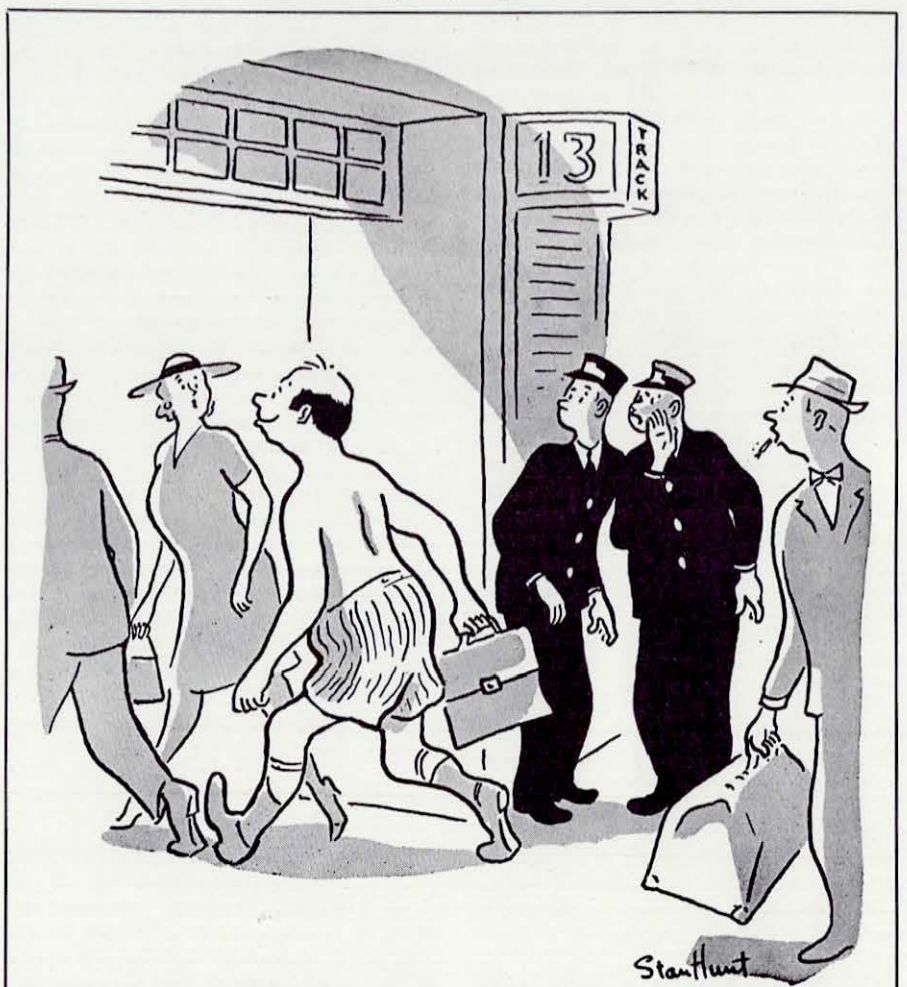

". . . Says he's traveling light — on orders from the ODT!!!"

From "Along the Line" (New Haven R. R.)

Construction

BALTIMORE & OHIO.—A contract has been awarded the Ogle Construction Company, Chicago, for the construction of a 200-ton electrically-operated reinforced concrete coaling station and ash handling plant serving two tracks at Cowen, W. Va.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.—The city of Tacoma, Wash., has awarded a contract amounting to approximately $349,000 to Strong and MacDonald, Tacoma, for the relocation of 12.7 miles of the Mt. Rainier National Park branch near Elbe, Wash. The relocation is required around the reservoir of a dam being constructed on the Nisqually river, known as the Nisqually power development project.

NEW YORK CENTRAL.—This railroad has awarded a contract for furnishing and installing electric wiring and lighting facilities, and for the construction of water mains and water supply lines for fire protection, for the Material Storage yard at Depew, N. Y., with the Edward Joy Company of Syracuse, N. Y.

NORTHERN PACIFIC.—This road is relaying about two miles of rail through the Stampede tunnel in Washington with continuous welded 131-lb. rail. The new rail is being welded in 1,300-ft. sections which, in turn, are welded together after being laid.

PENNSYLVANIA.—A contract has been awarded the Ogle Construction Company, Chicago, for the construction of combination coal, ash and sand handling facilities at Waverly yard, Newark, N. J., consisting of a 50-ton reinforced concrete coaling station, a 75-ton capacity reinforced concrete wet sand handling plant and a single-track ash handling plant of the electrically-controlled automatic skip-hoist type.

PENNSYLVANIA.—A contract has been awarded the Ogle Construction Company, Chicago, for the construction of a reinforced concrete coal and gravity sand handling plant at Altoona, Pa., which will serve four tracks and will have a capacity of 1,000 tons of stoker coal, 250 tons of mine run coal, 200 tons of wet sand and 25 tons of dry sand. The plant will be equipped with two fully-automatic electrically-operated skip-hoist units, each having a delivery capacity of 120 tons of coal or wet sand per hour.

WAR DEPARTMENT.—The U. S. Engineer Office, St. Louis, Mo., has awarded a contract in amount less than $50,000 to D. C. Bowman, St. Louis, for the construction of railroad spurs in Illinois.

PENNSYLVANIA.—The Interstate Commerce Commission has authorized this road to construct on rights-of-way of the Pittsburgh, Cincinnati, Chicago & St. Louis and New Cumberland & Pittsburgh a total of 12.2 miles of line extending from a point near Chester in Hancock County, W. Va., to a point near Raccoon Creek in Beaver County, Pa. The project, designed to serve a war industry, will cost about $632,000, which the Pennsylvania plans to amortize over a five-year period in accordance with provisions of the Internal Revenue Act.

Supply Trade

Salvage Wardens Will Hunt Scrap at Westinghouse

Two hundred "salvage wardens" will soon patrol the workshops of the Westinghouse Electric & Manufacturing Co., hunting out scrap and promoting full use of war-vital materials. Modeled after the civilian defense units which have been set up in communities throughout the country, the salvage warden plan will operate continuously and will be extended to other plants of the company after being tested at the East Pittsburgh, Pa., works.

Each scrap hunter will wear on his left arm a blue, red and yellow brassard, similar to the Office of Civilian Defense insignia worn by air raid wardens, which will bear the legend "Salvage Warden" and the V for Victory sign. Four workmen in each section were appointed zone wardens; each man to serve a full week every month. They are under the direction of district wardens who will meet weekly with the chief warden to report the findings of their men, review results and plan future action.

The first aim of the wardens is to reduce the amount of scrap by making every effort to find a productive use for all material. If a steel plate, for example, is not suitable on the job for which it was ordered, the warden checks other departments to see if it can be used there. The plate goes to the scrap pile only when it can serve no other wartime purpose. Next the wardens will hunt for dormant scrap —old machinery that cannot be repaired, useless materials stored in out-of-the-way corners, broken or obsolete tools in drawers and on benches. Ten million pounds of scrap were collected in the last six months at the East Pittsburgh plant and it is expected that several more million pounds can be found before the year ends.

To prevent mixing of different kinds of metals, a sharp watch will be kept on scrap bins placed beside cutting machines. If copper chips are contaminated with steel shavings, the resulting metal cannot be used again where pure copper is required. Every piece of steel, copper, aluminum and rubber, every idle machine and every operation will be checked by these men, and it is estimated that a 25 per cent increase in savings of materials will result.

Thirty tons of idle steel, copper and other metals will be taken from an abandoned service plant which is being dismantled in Pittsburgh, Pa. Five gondola cars that have not been used for years on the intra-plant railroad will soon be going into an open hearth furnace as first-grade scrap. More than 8,000 obsolete dies and jigs, made of high-grade steel, were released from storage and added to the scrap pile.

Last year all Westinghouse plants turned over 203 million lb. of scrap metals and other materials to scrap dealers, who make it available to other war industries, with the East Pittsburgh works accounting for approximately half of this total. So far this year there has been a 30 per cent increase in the amount of scrap going out to dealers.

The Army-Navy "E" burgee and lapel buttons were presented to the Dallas division of **Revere Copper and Brass, Inc.**, at Chicago, on October 7. The award was made for excellence in war production.

E. G. Bailey, vice-president of the Babcock & Wilcox Co., of New York, was presented with the first Percy Nicholls award "for notable scientific or industrial achievement in the field of solid fuels" by Eugene McAuliffe, president of the American Institute of Mining & Metallurgical Engineers, at a banquet of the joint fuels conference of the coal division, A. I. M. E., and fuels division, American Society of Mechanical Engineers, held in St. Louis, Mo., on September 30, 1942.

Army-Navy "E" pennants for high achievement in the production of war equipment were recently presented to the following five plants of the **Westinghouse Electric & Manufacturing Co.** in the Pittsburgh, Pa., area; the transformer division at Sharon, Pa., and the East Pittsburgh division, which includes the porcelain plant at Derry, Pa., the Nuttall Gearing Works in Pittsburgh's Lawrenceville section and the plants at East Pittsburgh and Trafford, Pa.

For high achievement in the production of axles and other vital equipment for the United States armed forces, three plants of the **Timken-Detroit Axle Company** located in Detroit, Mich., Waukegan, Ill., and Oshkosh, Wis., have been presented with the Army-Navy production award. Two ceremonies were held at the Detroit plant, one for the day shift, and the other for the night shift, on September 10. The awards were presented at the Illinois Manufacturing division plant in Waukegan and the Wisconsin Axle division in Oshkosh on September 12.

The Army-Navy production award has been conferred upon the Aurora, Ill., plant of the **Independent Pneumatic Tool Company.** Inspired by the accomplishment, the city council proclaimed October 8 as Army-Navy day and arranged a program of events including Army induction send-off ceremonies, a city-wide scrap and salvage drive, Army and Navy recruiting, special religious ceremonies, a 15-minute sale of war bonds and stamps by all merchants and a parade to Independent's plant, where the Army-Navy "E" burgee and individual "E" buttons were presented to the plant and its employees.

Inspired by the conferring of the Army-Navy production award upon the **Independent Pneumatic Tool Company,** manufacturers of Thor portable electric and pneumatic tools, the city council of Aurora, Ill., proclaimed October 8 as the

city's Army-Navy day, on which the entire community participated in a series of civic events culminating in the formal presentation of the award banner and "E" emblems to the employees of the tool company. The program for the day highlighted such activities as Army induction send-off ceremonies, a city-wide scrap and salvage drive, Army and Navy recruiting, special religious ceremonies and the conducting of a fifteen minute period when every merchant in the city sold only war bonds and stamps. High-ranking Army and Navy officers were present with other celebrities, and a parade with nearly 5,000 servicemen, workers, and civic organizations in its ranks proceeded from the city hall to the plant of the Independent Pneumatic Tool Company for the ceremonies.

William M. Roche, special sales representative of the **General American Transportation Corporation,** Chicago, has been granted a leave of absence to serve in the army as a major in the transportation corps.

Ralph R. Brady has been appointed manager of the commercial engineering department of the **Westinghouse Electric & Manufacturing Company's** lamp division at Bloomfield, N. J., to succeed **D. W. Atwater,** recently appointed manager of the new illuminating engineering department.

George W. Hoover has been appointed eastern sales representative of the **Kalamazoo Railway Supply Company,** Kalamazoo, Mich. Mr. Hoover, whose office is at 30 Church street, New York, will handle both domestic and export sales. **Joseph F. Leonard** has been appointed southeastern sales representative, with headquarters at Richmond, Va.

Henry A. Roemer, Jr., formerly manager of sales of steel and wire products for the **Pittsburgh Steel Company,** has been appointed assistant general manager of sales. **Norman F. Melville,** formerly assistant manager of sales of steel and wire products, has been appointed manager of sales of that department to succeed Mr. Roemer.

OBITUARY

C. D. Hilferty, who retired in March, 1941, from the Superheater Company, died September 26. He was 73 years of age. Mr. Hilferty had served as head draftsman at the Schenectady, N. Y., plant of the American Locomotive Company, where he designed the first locomotive piston valve, and later was employed on the Michigan Central. He was also formerly with Cooke Works in Paterson, N. Y., as resident inspector, and for three years was chief inspector at a plant of the American British Manufacturing Company in Bridgeport, Conn. He joined the Superheater Company in November, 1910, and after serving for five years as service engineer was transferred to engineering duties in the New York office. From 1921 until his retirement in 1941, he served as librarian and special research engineer for the company.

Financial

AKRON, CANTON & YOUNGSTOWN. *Authorization for Payments to Bondholders Sets Precedent.* A significant precedent by which payments may be made to holders of defaulted bonds of railroads which are undergoing reorganization has been set in the case of the Akron, Canton & Youngstown, which has received federal court authority to pay to holders of its outstanding mortgage bonds amounts equal to interest and dividends that would otherwise be paid on new bonds and preferred stock to be issued to these bondholders under the railroad's plan of reorganization.

The United States district court at Cleveland, Ohio, on September 28 authorized the trustees to pay on October 1, 1942, out of earnings for the preceding 12-month period, to holders of the general and refunding mortgage 6 per cent gold bonds, series A, and 5½ per cent gold bonds, series B, amounts equal to the dividends which would have accrued from October 1, 1941, to September 30, 1942, on the 5 per cent preferred stock which these bondholders would receive under the road's plan of reorganization, which has not been consummated. Bondholders are to surrender bonds to the Cleveland Trust Company, agent for the trustees, for stamping.

Payments were also authorized for October 1, in amounts equal to the interest which would have accrued for the period April, 1942, to September 30, 1942, on the 4 per cent consolidated mortgage bonds, series A, which are issuable to holders of the first mortgage 5 per cent gold bonds of the Northern Ohio, under the plan of reorganization of the Akron, Canton & Youngstown and the Northern Ohio, and to the holders of detached complete sets of eight coupons from the same bond, dated April 1, 1935, to October 1, 1938, inclusive. Bonds are to be presented to the Central Hanover Bank & Trust Co. of New York, agent for the trustees. The railroad's plan of reorganization has been approved by the Interstate Commerce Commission and by the court.

ATCHISON, TOPEKA & SANTA FE. *Abandonment.* This road has been authorized by the Interstate Commerce Commission, Division 4, to abandon a 27.54-mile branch line extending from Florence, Kans., to Eldorado.

ATCHISON, TOPEKA & SANTA FE.—*Trackage Rights.*—This company has asked the Interstate Commerce Commission for authority to acquire trackage rights over a portion of the line of the Los Angeles & Salt Lake (leased to the Union Pacific) extending from Daggett, Calif., to West Yermo, 1.7 miles.

ATCHISON, TOPEKA & SANTA FE.—*Abandonment by the Rocky Mountain & Santa Fe.*—The Rocky Mountain & Santa Fe and the Atchison, Topeka & Santa Fe, respectively, have asked the Interstate Commerce Commission for authority to abandon a line and the operation thereof extending from Raton, N. M., to Sugarite, 5.8 miles.

BALTIMORE & OHIO. *Abandonment.* This road and the Mount Jewett, Kinzua & Riterville have been authorized by the Interstate Commerce Commission, Division 4, respectively, to abandon operation and abandon the latter's entire line, extending from Mount Jewett, Pa., Kushequa, 4.11 miles.

CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC. *Abandonment and Acquisition.* This road has applied to the Interstate Commerce Commission for approval of relocation arrangements necessitated by the construction of a dam by the city of Tacoma, Wash. The arrangements involve abandonment of the Milwaukee's 14-mile line between Eatonville, Wash., and Elbe, and the acquisition of a relocated line of 12.66 miles between those points.

CHICAGO, ROCK ISLAND & PACIFIC. *Abandonment.* Examiner R. Romero has recommended in a proposed report that the Interstate Commerce Commission's Division 4 permit the abandonment by this road of a 33.90-mile branch line, extending from Lawton, Okla., to Grandfield. The examiner conceded that communities affected would be inconvenienced, but nevertheless held that continued operation of the branch would impose "an unnecessary and undue burden upon the applicants and upon interstate commerce." As for the request of railway labor organizations for the imposition of employee-protection conditions, the proposed report recommended that jurisdiction over that matter be reserved. Meanwhile, Mr. Romero suggested that the 11 employees involved would in these times of labor scarcity "encounter no difficulty in obtaining employment on other lines of the applicants."

DELAWARE, LACKAWANNA & WESTERN. *U. S. Begins Tax Suits Against Road and Leased Lines.*—Civil suits for the payment of back income taxes approximating $2,500,000, including interest, were begun by the United States government in the federal court at New York on September 30 against the Delaware, Lackawanna & Western and two of its leased railroads, the Lackawanna R. R. of New Jersey, which is alleged to owe $900,000, and the New York, Lackawanna & Western, which is alleged to owe $1,600,000. Under the lease agreement, the D. L. & W. agreed to pay stockholders of these two companies a stated rate of interest on the par value of their stocks. Because the D. L. & W. pays rentals directly to the stockholders of its leased railroads, these roads have no money to pay income taxes, and a recent United States Circuit Court of Appeals ruling, which held the D. L. & W. not responsible for taxes accumulated against its leased roads amounting to $5,575,000, suggested that the government sue to enjoin payment to stockholders of lessor companies before the government could file tax liens against those companies.

Pending determination of the suit, preliminary injunctions were signed enjoining any stockholder payments by the D. L. & W. out of rentals now due or hereafter payable to the two leased roads. (Both the Lackawanna of New Jersey and the N. Y., Lackawanna & Western recently

filed suits seeking to compel the D. L. & W. to pay their accumulated federal taxes.)

ERIE.—*Reorganization Plan for Northern of New Jersey Opposed in Court.*—Cameron Blaikie, Jr., and A. H. Lawrence, stockholders of the Northern of New Jersey, have petitioned the United States district court at Newark, N. J., to reopen hearings on the reorganization plan of that railroad, which has been approved by the court and is now being voted on by stockholders. Under the plan, the Erie will acquire the Northern's 25 miles of trackage between Jersey City, N. J., and Nyack, N. Y. Petitioners claim the Northern's real earning power was not demonstrated to the court and that excessive estimates of its cost of operation were presented.

FLORIDA EAST COAST.—*Interest Payment Authorized.*—The United States district court at Jacksonville, Fla., on October 1 authorized the payment of the interest coupon due September 1, 1931, the oldest coupon in default, on this railroad's first and refunding 5 per cent bonds. The total payment will aggregate $1,125,000.

LEHIGH VALLEY.—*Elected a Director.*—F. R. Gerard, vice-president and general manager of the Lehigh Valley, has been elected a director of the company.

MISSOURI PACIFIC.—*Seeks Order to Repay R. F. C. and Banks.*—The executive committee of the Missouri Pacific will ask the United States district court at St. Louis, Mo., to authorize the re-payment of the railroad's debt to the R. F. C. amounting to $23,134,800 plus interest and in addition to authorize retirement of the railroad's debt to certain New York banks amounting to $5,850,000, in order to reduce outstanding indebtedness and save heavy interest charges. It was believed that the R. F. C. might accept payment at an interest rate less than the 6 per cent at which interest has been accruing since the loans were made in 1932 and 1933. Interest accruals now amount to $13,800,000 and reduction of the interest rate to 4 per cent would save about $5,000,000 for the railroad, while repayment of the loan would eliminate annual interest charges of $1,338,000.

Colonel T. C. Davis, chairman of the executive committee, explained that payment to the banks will be made on condition that the banks make as favorable an adjustment on their loans as may be obtained from the R. F. C. Recent conversations with banking officials indicate that such an arrangement could be made. Total savings in back interest by these two payments would exceed $6,000,000 and eliminate annual interest payments of more than $1,700,000. Hearings on the petitions were scheduled for October 9.

Col. Davis said that the so-called "Stedman Plan" of reorganization for the Missouri Pacific, which was formulated in 1937 and which is backed by the insurance companies, had been outmoded by the rejuvenation of the railroad's earning power under a military economy that may continue for years and by increases in taxation which have placed a high premium upon bond investments as distinct from stock investments. "Under the new tax bill . . . whatever may happen to the capital base, the bond interest is exempt from normal tax and surtax, as well as excess profits tax, while income applicable to preferred and common stocks is exempt from none of these taxes."

Col. Davis recently returned from an inspection trip over the entire Missouri Pacific system and reported the company's physical properties were in by far the finest condition in their history. "More than $350,000,000 has been put back into maintenance of way and equipment since interest payments were stopped in 1933, while $65,000,000 has, in addition, been capitalized in additions and betterments. Net earnings in 1942 are expected to exceed $60,000,000 as compared with $30,000,000 in 1941 and $34,000,000 in the record-breaking year 1929. Cash and government securities should stand at more than $70,000,000 which sum alone nearly equals the current market value placed upon the road's first and refunding mortgage bonds." (Cash and government securities are reported to already exceed $60,000,000.)

ST. LOUIS-SAN FRANCISCO.—*Hearing Adjourned on Proposed Bond and Interest Payments.*—The United States district court at St. Louis, Mo., has adjourned until October 9 hearings on the petition of trustees of the St. Louis-San Francisco to pay off $6,905,670 principal amount of Kansas City, Memphis & Birmingham bonds, representing $3,323,390 general mortgage 4 per cent bonds and $3,582,280 income 5 per cent bonds plus accrued interest. A petition was also filed by the Fort Scott prior lien and consolidated bondholders committee seeking a court order which would authorize trustees of the St. Louis-San Francisco to pay out $8,009,434 in interest.

ST. LOUIS SOUTHWESTERN.—*Seeks Court Authority for Interest Payments.*—The United States district court at St. Louis, Mo., on October 9 will hear the petition of the trustee of this road for authority to pay back interest amounting to $100 per $1,000 principal amount of second mortgage 4 per cent gold income bonds, this payment covering five interest coupons due semi-annually from January 1, 1938, to January 1, 1940, inclusive. It is proposed to pay also two coupons due July 1, 1936, and January 1, 1937, or $50 per $1,000 bond, on the 5 per cent first terminal and unifying mortgage bonds and the balance of $16.50 per $1,000 bond, which was due January 1, 1936, on the general and refunding 5 per cent bonds. A partial payment on this latter interest installment amounting to $8.50 per $1,000 bond had previously been made.

Average Prices Stocks and Bonds

	Oct. 6	Last week	Last year
Average price of 20 representative railway stocks..	29.49	28.52	29.46
Average price of 20 representative railway bonds..	68.53	67.71	64.55

Dividends Declared

Carolina, Clinchfield & Ohio.—$1.25, quarterly, payable October 20 to holders of record October 10.

Railway Officers

EXECUTIVE

R. S. B. Hartz, assistant to senior vice-president (accounting) of the Baltimore & Ohio, with headquarters at Baltimore, Md., has been appointed assistant to vice-president, finance, treasury and relief departments.

B. E. Young, manager of the Railroad Section, Public Relations department, Association of American Railroads, has been appointed executive representative of the Southern, with headquarters at Washington, D. C. Mr. Young was born at Martinsburg, W. Va., on April 18, 1905, and entered railway service as a messenger in the office of the general claim agent of the Norfolk & Western at Roanoke, Va., in March, 1917. After serving in various ca-

B. E. Young

pacities in the claim, motive power, and safety departments of the Norfolk & Western, he became chief clerk in the office of the manager, advertising, publicity and magazine departments of that road in September, 1929. In July, 1936, he was given a leave of absence by the Norfolk & Western to assist in setting up and administering the public relations program of the Association of American Railroads, continuing as manager of the A. A. R.'s Railroad Section until his appointment as executive representative of the Southern.

Nathaniel S. Brown, whose retirement on October 1 as vice-president and general counsel of the Wabash, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of October 3, was born at Barry, Ill., on August 28, 1872, and attended Central College, Danville, Ind., and the University of Missouri graduating in law from the latter in 1901. He entered railway service on February 1, 1907, as an assistant attorney of the Wabash and in 1912 he was promoted to general attorney. Mr. Brown was advanced to assistant general solicitor in 1915, to general solicitor in 1918 and to vice-president and general solicitor in 1920. In 1932 he was appoint-

ed general counsel for the receivers and on May 21, 1942, after the Wabash was reorganized, he was elected vice-president and general counsel of the new company.

Boynton S. Voorhees, engineering assistant to vice-president of the New York Central system, has been appointed assistant vice-president, with headquarters as before at New York. Mr. Voorhees was born at Hackensack, N. J., on April 29, 1886, and received his Ph.B. in 1907 from Sheffield Scientific School, Yale University. He entered railroad service in 1907 with the New York, New Haven & Hartford, serving successively as rodman and inspector in the maintenance of way department. From 1908 to 1912 Mr. Voorhees served successively as rodman, instrumentman and inspector in the construction department of the New York Central and in the latter year he became assistant engineer of grade crossings. He was promoted to engineer of grade crossings in

Conway
Boynton S. Voorhees

1916 and in 1920 he became district engineer, Eastern division. Later in 1920 Mr. Voorhees was appointed general office engineer of the New York Central system, which position he held until 1924, when he became engineering assistant to vice-president, improvements and development.

PURCHASES AND STORES

William C. Atherton, purchasing agent of the Pere Marquette, with headquarters at Cleveland, Ohio, retired on October 1 after fifty years of continuous railroad service. Mr. Atherton was born on July 3, 1872, and entered railway service in 1892 as clerk in the stores and mechanical departments of the Baltimore & Ohio. He was promoted to division storekeeper, at Willard, Ohio, in 1894 and was subsequently a clerk in the motive power departments of the Elgin, Joliet & Eastern; the Chicago & Western Michigan (now part of the Pere Marquette); the Chicago, Peoria & St. Louis (later sold to various roads and partially abandoned); and the St. Louis, Peoria & Northern (now divided between the Illinois Central and the Alton). He was appointed general storekeeper of the Chicago & Eastern Illinois, at Danville, Ill., in 1900, and in 1903 went with the Pere Marquette as general storekeeper. Mr. Atherton was advanced to general storekeeper and fuel agent in 1905, and to purchasing agent in 1908, which position he held until his retirement.

FINANCIAL, LEGAL AND ACCOUNTING

R. S. Tatum, paymaster of the Tennessee Central at Nashville, Tenn., has been promoted to assistant treasurer, with the same headquarters.

The law firm of **Armstead, Waller, Davis and Lansden,** Nashville, Tenn., has been elected general counsel of the Tennessee Central, succeeding **Walter Stokes,** whose death on August 15 was reported in the *Railway Age* of August 22.

R. B. Hamer, affiliated with the law firm of Ellick-Fitzgerald-Smith, at Omaha, Neb., has been appointed assistant general attorney of the Union Pacific for Nebraska and Iowa, with headquarters at Omaha, succeeding **W. J. Schall,** who recently joined the U. S. Navy as an ensign.

L. O. Todd, auditor of the Georgia & Florida, has been appointed assistant to receiver and chief accounting officer, with headquarters as before at Augusta, Ga. **F. F. Dressel** has been appointed assistant auditor, succeeding **Henry C. Baird,** who has been promoted to auditor.

J. F. Grier has been appointed assistant to the real estate agent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle, Wash., succeeding **A. L. Sedgwick,** who has been commissioned a major in the U. S. Army Transportation Corps and will be stationed at Ft. Hamilton, N. Y.

Dale McGrath, assistant auditor of disbursements of the Atchison, Topeka & Santa Fe at Topeka, Kan., has been promoted to auditor of disbursements, with the same headquarters, succeeding **E. S. Marsh,** who has been promoted to chief clerk in the office of the president at Chicago, as reported in the *Railway Age* of September 5.

J. C. Wallace, general auditor-disbursements of the New York Central, with headquarters at New York, has retired after 30 years of service, and the position of general auditor-disbursements has been abolished. **R. R. Richards,** assistant general auditor-disbursements, has been appointed auditor of disbursements, with headquarters as before at New York. **J. B. Taylor** has been appointed assistant auditor of disbursements, with headquarters at Detroit, Mich. The position of general departmental accountant has been abolished. **R. H. Kroger** has been appointed departmental accountant of the line West, Big Four and Michigan Central operating districts, with headquarters at Detroit, Mich.

W. A. Fravel, assistant manager of the Insurance department of the Southern, with headquarters at Washington, D. C., has been promoted to manager of that department, to succeed the late **E. B. Berry. J. W. Martin,** assistant to vice-president —finance, purchasing, real estate and insurance departments, has been promoted to assistant manager of insurance.

Mr. Fravel was born at Luray, Va., on March 9, 1875, and entered the service of the Southern on March 23, 1898, as insurance clerk in the assistant general manager's office. He transferred to the office of insurance agent in 1904 and became chief clerk to the superintendent of insurance in 1907, continuing in that position until December 1, 1941, when both he and Carlisle Needham were appointed assistant managers of insurance. Mr. Needham will continue, with Mr. Martin, in that capacity.

Mr. Martin was born at Louisville, Ky., on September 5, 1898, and began service with the Southern in 1913 in the Washington offices, holding various clerical positions until he entered the United States Army in 1918. He returned to railway service with the Southern's passenger traffic department in 1919. After several promotions, he became assistant to vice-president—finance, purchasing, real estate and insurance departments, on November 1, 1926, continuing in that capacity until his appointment as assistant manager of insurance.

OPERATING

Thomas F. Goodwin has been appointed terminal supervisor of the Southern Pacific, with headquarters at San Francisco, Cal.

E. L. Eustes, trainmaster of the Missouri Pacific at Jefferson City, Mo., has been transferred to Pueblo, Colo., and **F. E. Fletcher** has been appointed trainmaster at Jefferson City, succeeding Mr. Eustes.

Pedro G. Pantoja has been appointed superintendent of the Southeastern division of the National Railways of Mexico, with headquarters at Tierra Blanca, Ver., temporarily relieving **Rafael S. Martinez,** who has been granted a leave of absence.

F. H. Wyer has been appointed transportation inspector of the Central region of the Canadian National, with headquarters at Toronto, Ont. **J. P. H. Begin** has been appointed assistant rule instructor, with headquarters at Quebec, Que.

W. W. Preisch, assistant superintendent of the Lehigh Valley at Wilkes-Barre, Pa., has been promoted to superintendent at Buffalo, N. Y. **A. J. Ferentz,** superintendent car department at Bethlehem, Pa., has been appointed assistant superintendent at Wilkes-Barre, succeeding Mr. Preisch.

J. R. Kimpton, superintendent of the Canadian Pacific at Woodstock, N. B., has been transferred to the Laurentian division, with headquarters at Montreal, Que., succeeding **R. A. Sewell,** who has been granted leave of absence on account of ill health.

L. A. High, trainmaster of the Wabash at Moberly, Mo., has been promoted to superintendent of the Moberly division, with the same headquarters, succeeding **F. C. Flynn,** who has been transferred to the Montpelier division, with headquarters at Montpelier, Ohio. Mr. Flynn relieves **H.**

filed suits seeking to compel the D. L. & W. to pay their accumulated federal taxes.)

ERIE.—*Reorganization Plan for Northern of New Jersey Opposed in Court.*—Cameron Blaikie, Jr., and A. H. Lawrence, stockholders of the Northern of New Jersey, have petitioned the United States district court at Newark, N. J., to reopen hearings on the reorganization plan of that railroad, which has been approved by the court and is now being voted on by stockholders. Under the plan, the Erie will acquire the Northern's 25 miles of trackage between Jersey City, N. J., and Nyack, N. Y. Petitioners claim the Northern's real earning power was not demonstrated to the court and that excessive estimates of its cost of operation were presented.

FLORIDA EAST COAST.—*Interest Payment Authorized.*—The United States district court at Jacksonville, Fla., on October 1 authorized the payment of the interest coupon due September 1, 1931, the oldest coupon in default, on this railroad's first and refunding 5 per cent bonds. The total payment will aggregate $1,125,000.

LEHIGH VALLEY.—*Elected a Director.*—F. R. Gerard, vice-president and general manager of the Lehigh Valley, has been elected a director of the company.

MISSOURI PACIFIC.—*Seeks Order to Repay R. F. C. and Banks.*—The executive committee of the Missouri Pacific will ask the United States district court at St. Louis, Mo., to authorize the re-payment of the railroad's debt to the R. F. C. amounting to $23,134,800 plus interest and in addition to authorize retirement of the railroad's debt to certain New York banks amounting to $[illegible]50,000, in order to reduce outstanding indebtedness and save heavy interest charges. It was believed that the R. F. C. might accept payment at an interest rate less than the 6 per cent at which interest has been accruing since the loans were made in 1932 and 1933. Interest accruals now amount to $13,800,000 and reduction of the interest rate to 4 per cent would save about $5,000,000 for the railroad, while repayment of the loan would eliminate annual interest charges of $1,338,000.

Colonel T. C. Davis, chairman of the executive committee, explained that payment to the banks will be made on condition that the banks make as favorable an adjustment on their loans as may be obtained from the R. F. C. Recent conversations with banking officials indicate that such an arrangement could be made. Total savings in back interest by these two payments would exceed $6,000,000 and eliminate annual interest payments of more than $1,700,000. Hearings on the petitions were scheduled for October 9.

Col. Davis said that the so-called "Stedman Plan" of reorganization for the Missouri Pacific, which was formulated in 1937 and which is backed by the insurance companies, had been outmoded by the rejuvenation of the railroad's earning power under a military economy that may continue for years and by increases in taxation which have placed a high premium upon bond investments as distinct from stock investments. "Under the new tax bill . . . whatever may happen to the capital base, the bond interest is exempt from normal tax and surtax, as well as excess profits tax, while income applicable to preferred and common stocks is exempt from none of these taxes."

Col. Davis recently returned from an inspection trip over the entire Missouri Pacific system and reported the company's physical properties were in by far the finest condition in their history. "More than $350,000,000 has been put back into maintenance of way and equipment since interest payments were stopped in 1933, while $65,000,000 has, in addition, been capitalized in additions and betterments. Net earnings in 1942 are expected to exceed $60,000,000 as compared with $30,000,000 in 1941 and $34,000,000 in the record-breaking year 1929. Cash and government securities should stand at more than $70,000,000 which sum alone nearly equals the current market value placed upon the road's first and refunding mortgage bonds." (Cash and government securities are reported to already exceed $60,000,000.)

ST. LOUIS-SAN FRANCISCO.—*Hearing Adjourned on Proposed Bond and Interest Payments.*—The United States district court at St. Louis, Mo., has adjourned until October 9 hearings on the petition of trustees of the St. Louis-San Francisco to pay off $6,905,670 principal amount of Kansas City, Memphis & Birmingham bonds, representing $3,323,390 general mortgage 4 per cent bonds and $3,582,280 income 5 per cent bonds plus accrued interest. A petition was also filed by the Fort Scott prior lien and consolidated bondholders committee seeking a court order which would authorize trustees of the St. Louis-San Francisco to pay out $8,009,434 in interest.

ST. LOUIS SOUTHWESTERN.—*Seeks Court Authority for Interest Payments.*—The United States district court at St. Louis, Mo., on October 9 will hear the petition of the trustee of this road for authority to pay back interest amounting to $100 per $1,000 principal amount of second mortgage 4 per cent gold income bonds, this payment covering five interest coupons due semi-annually from January 1, 1938, to January 1, 1940, inclusive. It is proposed to pay also two coupons due July 1, 1936, and January 1, 1937, or $50 per $1,000 bond, on the 5 per cent first terminal and unifying mortgage bonds and the balance of $16.50 per $1,000 bond, which was due January 1, 1936, on the general and refunding 5 per cent bonds. A partial payment on this latter interest installment amounting to $8.50 per $1,000 bond had previously been made.

Average Prices Stocks and Bonds

	Oct. 6	Last week	Last year
Average price of 20 representative railway stocks..	29.49	28.52	29.46
Average price of 20 representative railway bonds..	68.53	67.71	64.55

Dividends Declared

Carolina, Clinchfield & Ohio.—$1.25, quarterly, payable October 20 to holders of record October 10.

Railway Officers

EXECUTIVE

R. S. B. Hartz, assistant to senior vice-president (accounting) of the Baltimore & Ohio, with headquarters at Baltimore, Md., has been appointed assistant to vice-president, finance, treasury and relief departments.

B. E. Young, manager of the Railroad Section, Public Relations department, Association of American Railroads, has been appointed executive representative of the Southern, with headquarters at Washington, D. C. Mr. Young was born at Martinsburg, W. Va., on April 18, 1905, and entered railway service as a messenger in the office of the general claim agent of the Norfolk & Western at Roanoke, Va., in March, 1917. After serving in various ca-

B. E. Young

pacities in the claim, motive power, and safety departments of the Norfolk & Western, he became chief clerk in the office of the manager, advertising, publicity and magazine departments of that road in September, 1929. In July, 1936, he was given a leave of absence by the Norfolk & Western to assist in setting up and administering the public relations program of the Association of American Railroads, continuing as manager of the A. A. R.'s Railroad Section until his appointment as executive representative of the Southern.

Nathaniel S. Brown, whose retirement on October 1 as vice-president and general counsel of the Wabash, with headquarters at St. Louis, Mo., was reported in the *Railway Age* of October 3, was born at Barry, Ill., on August 28, 1872, and attended Central College, Danville, Ind., and the University of Missouri graduating in law from the latter in 1901. He entered railway service on February 1, 1907, as an assistant attorney of the Wabash and in 1912 he was promoted to general attorney. Mr. Brown was advanced to assistant general solicitor in 1915, to general solicitor in 1918 and to vice-president and general solicitor in 1920. In 1932 he was appoint-

ed general counsel for the receivers and on May 21, 1942, after the Wabash was reorganized, he was elected vice-president and general counsel of the new company.

Boynton S. Voorhees, engineering assistant to vice-president of the New York Central system, has been appointed assistant vice-president, with headquarters as before at New York. Mr. Voorhees was born at Hackensack, N. J., on April 29, 1886, and received his Ph.B. in 1907 from Sheffield Scientific School, Yale University. He entered railroad service in 1907 with the New York, New Haven & Hartford, serving successively as rodman and inspector in the maintenance of way department. From 1908 to 1912 Mr. Voorhees served successively as rodman, instrumentman and inspector in the construction department of the New York Central and in the latter year he became assistant engineer of grade crossings. He was promoted to engineer of grade crossings in

Conway
Boynton S. Voorhees

1916 and in 1920 he became district engineer, Eastern division. Later in 1920 Mr. Voorhees was appointed general office engineer of the New York Central system, which position he held until 1924, when he became engineering assistant to vice-president, improvements and development.

PURCHASES AND STORES

William C. Atherton, purchasing agent of the Pere Marquette, with headquarters at Cleveland, Ohio, retired on October 1 after fifty years of continuous railroad service. Mr. Atherton was born on July 3, 1872, and entered railway service in 1892 as clerk in the stores and mechanical departments of the Baltimore & Ohio. He was promoted to division storekeeper, at Willard, Ohio, in 1894 and was subsequently a clerk in the motive power departments of the Elgin, Joliet & Eastern; the Chicago & Western Michigan (now part of the Pere Marquette); the Chicago, Peoria & St. Louis (later sold to various roads and partially abandoned); and the St. Louis, Peoria & Northern (now divided between the Illinois Central and the Alton). He was appointed general storekeeper of the Chicago & Eastern Illinois, at Danville, Ill., in 1900, and in 1903 went with the Pere Marquette as general storekeeper. Mr. Atherton was advanced to general storekeeper and fuel agent in 1905, and to purchasing agent in 1908, which position he held until his retirement.

FINANCIAL, LEGAL AND ACCOUNTING

R. S. Tatum, paymaster of the Tennessee Central at Nashville, Tenn., has been promoted to assistant treasurer, with the same headquarters.

The law firm of **Armstead, Waller, Davis and Lansden,** Nashville, Tenn., has been elected general counsel of the Tennessee Central, succeeding **Walter Stokes,** whose death on August 15 was reported in the *Railway Age* of August 22.

R. B. Hamer, affiliated with the law firm of Ellick-Fitzgerald-Smith, at Omaha, Neb., has been appointed assistant general attorney of the Union Pacific for Nebraska and Iowa, with headquarters at Omaha, succeeding **W. J. Schall,** who recently joined the U. S. Navy as an ensign.

L. O. Todd, auditor of the Georgia & Florida, has been appointed assistant to receiver and chief accounting officer, with headquarters as before at Augusta, Ga. **F. F. Dressel** has been appointed assistant auditor, succeeding **Henry C. Baird,** who has been promoted to auditor.

J. F. Grier has been appointed assistant to the real estate agent of the Chicago, Milwaukee, St. Paul & Pacific, with headquarters at Seattle, Wash., succeeding **A. L. Sedgwick,** who has been commissioned a major in the U. S. Army Transportation Corps and will be stationed at Ft. Hamilton, N. Y.

Dale McGrath, assistant auditor of disbursements of the Atchison, Topeka & Santa Fe at Topeka, Kan., has been promoted to auditor of disbursements, with the same headquarters, succeeding **E. S. Marsh,** who has been promoted to chief clerk in the office of the president at Chicago, as reported in the *Railway Age* of September 5.

J. C. Wallace, general auditor-disbursements of the New York Central, with headquarters at New York, has retired after 30 years of service, and the position of general auditor-disbursements has been abolished. **R. R. Richards,** assistant general auditor-disbursements, has been appointed auditor of disbursements, with headquarters as before at New York. **J. B. Taylor** has been appointed assistant auditor of disbursements, with headquarters at Detroit, Mich. The position of general departmental accountant has been abolished. **R. H. Kroger** has been appointed departmental accountant of the line West, Big Four and Michigan Central operating districts, with headquarters at Detroit, Mich.

W. A. Fravel, assistant manager of the Insurance department of the Southern, with headquarters at Washington, D. C., has been promoted to manager of that department, to succeed the late **E. B. Berry. J. W. Martin,** assistant to vice-president—finance, purchasing, real estate and insurance departments, has been promoted to assistant manager of insurance.

Mr. Fravel was born at Luray, Va., on March 9, 1875, and entered the service of the Southern on March 23, 1898, as insurance clerk in the assistant general manager's office. He transferred to the office of insurance agent in 1904 and became chief clerk to the superintendent of insurance in 1907, continuing in that position until December 1, 1941, when both he and Carlisle Needham were appointed assistant managers of insurance. Mr. Needham will continue, with Mr. Martin, in that capacity.

Mr. Martin was born at Louisville, Ky., on September 5, 1898, and began service with the Southern in 1913 in the Washington offices, holding various clerical positions until he entered the United States Army in 1918. He returned to railway service with the Southern's passenger traffic department in 1919. After several promotions, he became assistant to vice-president—finance, purchasing, real estate and insurance departments, on November 1, 1926, continuing in that capacity until his appointment as assistant manager of insurance.

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F. H. Wyer has been appointed transportation inspector of the Central region of the Canadian National, with headquarters at Toronto, Ont. **J. P. H. Begin** has been appointed assistant rule instructor, with headquarters at Quebec, Que.

W. W. Preisch, assistant superintendent of the Lehigh Valley at Wilkes-Barre, Pa., has been promoted to superintendent at Buffalo, N. Y. **A. J. Ferentz,** superintendent car department at Bethlehem, Pa., has been appointed assistant superintendent at Wilkes-Barre, succeeding Mr. Preisch.

J. R. Kimpton, superintendent of the Canadian Pacific at Woodstock, N. B., has been transferred to the Laurentian division, with headquarters at Montreal, Que., succeeding **R. A. Sewell,** who has been granted leave of absence on account of ill health.

L. A. High, trainmaster of the Wabash at Moberly, Mo., has been promoted to superintendent of the Moberly division, with the same headquarters, succeeding **F. C. Flynn,** who has been transferred to the Montpelier division, with headquarters at Montpelier, Ohio. Mr. Flynn relieves **H.**

G. Pace, who has been granted a leave of absence because of illness.

J. E. Buster has been appointed trainmaster of the Southern at Columbia, S. C., succeeding **M. M. Coleman. T. O. Crane,** trainmaster of the Birmingham division, has been transferred to the Alabama Great Southern, with headquarters as before at Birmingham, Ala., succeeding **J. P. Kelly,** who has been transferred to the Birmingham division, to succeed Mr. Crane.

M. H. Gold, division superintendent of the Seaboard Air Line at Raleigh, N. C., has been promoted to assistant general manager, with the same headquarters. **W. R. Olive,** division superintendent at Hamlet, N. C., has been tansferred to Raleigh. **J. H. Bowen,** division superintendent at Atlanta, Ga., has been transferred to Hamlet. **T. W. Smith** has been appointed division superintendent at Atlanta, succeeding Mr. Bowen.

E. G. Wright, assistant superintendent of the New York Central at Erie, Pa., has been promoted to superintendent of the Michigan division of the Michigan Central, with headquarters at Jackson, Mich., succeeding **R. F. DeForest,** who has been transferred to the Detroit division, with headquarters at Detroit, Mich. Mr. DeForest relieves **L. J. Robbins,** who has been appointed assistant superintendent of the Detroit division, replacing **A. W. Laskoske,** who has been transferred to the West and Western divisions, with headquarters at Chicago.

J. D. Woodard has been appointed trainmaster of the Missouri Pacific at Hoisington, Kan., succeeding **W. A. Learmont,** assigned to other duties. **F. H. Conklin** has been appointed trainmaster of the Salina and Council Grove subdivisions (including Council Grove, Kan.) at Osawatomie, Kan., and **S. F. Ayler** has been appointed trainmaster of the Kansas City, Osawatomie and Topeka subdivisions at Osawatomie. **C. E. Wood** has been appointed trainmaster of the River and Marshall subdivisions, with headquarters at Jefferson City, Mo., and **B. W. Smith,** trainmaster at Jefferson City, has been assigned the Sedalia, Warsaw and Lexington subdivisions, with the same headquarters.

F. B. Lyman, terminal trainmaster of the Grand Trunk Western at Detroit, Mich., has been promoted to terminal superintendent, with the same headquarters, succeeding **Edward F. Gorman,** who retired on October 1. **T. D. Ash,** trainmaster of the Grand Rapids, Muskegon, Saginaw and Holly (west of Pontiac, Mich.) subdivisions, has been transferred to the Detroit terminals, relieving Mr. Lyman, and **E. O. Dunn,** chief dispatcher of the Detroit division, has been advanced to trainmaster, replacing Mr. Ash.

Mr. Gorman was born at Lima, Ohio, on September 29, 1875, and entered railway service in 1894 as a clerk of the Cincinnati, Hamilton & Dayton (now part of the Baltimore & Ohio). From 1899 to 1907 he served as a brakeman and conductor on the same road and in the latter year he was appointed general yardmaster. Mr. Gorman went with the Pere Marquette as a trainmaster in 1913 and three years later he left railway service to become general agent of the Studebaker Corporation. In 1918 and 1919 he served with the U. S. Railroad Administration and then went with the Grand Trunk Western as superintendent of terminals at Detroit, which position he held until his retirement. In 1921 Mr. Gorman served as the first president of the Detroit Association of Superintendents.

Charles G. Stewart, assistant chief engineer of the Pittsburgh & Lake Erie, has been promoted to general manager, with headquarters at Pittsburgh, Pa., succeeding **Michael A. Smith,** who retired on October 1. Mr. Stewart was born on November 27, 1885, at Hockingport, Ohio, and received his bachelor of science degree from Ohio University in 1910 and his civil engineering degree from Cornell University in 1912. He entered railroad service on October 1, 1912, as an assistant on the engineering corps of the Pennsylvania at Cleveland, Ohio. From November, 1916, to March, 1923, Mr. Stewart was employed

Charles G. Stewart

by the Baltimore & Ohio, serving successively as assistant supervisor at Walkerton, Ind., assistant district engineer at Cincinnati, Ohio, and assistant division engineer at Flora, Ill., and Washington, Ind. He was engineer maintenance of buildings for the Jones & Laughlin Steel Corporation at its South Side Works, Pittsburgh, Pa., from March, 1923, to April, 1925, and from the latter date to January, 1927, he was identified with the real estate business. In January, 1927, Mr. Stewart was appointed engineering draftsman for the Pittsburgh & Lake Erie at Pittsburgh, and served in this capacity until December 1, 1940, when he became assistant chief engineer.

A. Floyd McKelvie, assistant superintendent of the Chicago, Burlington & Quincy at Creston, Iowa, has been promoted to superintendent of the Centerville division, with headquarters at Centerville, Iowa, succeeding **Walter O. Frame,** who has been appointed superintendent of the Ft. Worth & Denver City and general superintendent of the Wichita Valley (Burlington lines), with headquarters at Wichita Falls, Tex., relieving **Sidney A. Covington,** who retired on September 30. **W. A. Squires,** trainmaster of the Ottumwa division of the Burlington, has been advanced to assistant superintendent at Creston, replacing Mr. McKelvie.

Mr. McKelvie was born at Brooklyn, Ill., on November 24, 1890, and attended Knox College, Galesburg, Ill., in 1910 and

A. Floyd McKelvie

1911 and the Gem City Business College, Quincy, Ill., in 1911 and 1912. He entered railway service on March 25, 1912, with Burlington at St. Louis, Mo., and served in various clerical positions in the freight house and yards at St. Louis and East St. Louis, Ill., until February 12, 1916, when he was advanced to chief yard clerk and assistant yardmaster at the latter point. On October 13, 1920, he was assigned to staff work in the offices of the general superintendent of transportation and the general manager at Chicago, and on February 1, 1926, he was promoted to trainmaster at Aurora, Ill. Mr. McKelvie returned to Chicago on October 23, 1928, assigned to staff work on the organization of the Burlington Transportation Company (motor transport subsidiary) and on September 10, 1932, he was appointed trainmaster at Beardstown, Ill. On November 1, 1932, he was transferred to Galesburg, Ill., and on July 1, 1936, he was advanced to assistant superintendent at Sterling, Colo. Mr. McKelvie was transferred to Creston on May 16, 1939, where he remained until his recent promotion, effective October 1.

Mr. Covington was born at Danville, Ill., on November 28, 1878, and entered railway service in 1898 as a messenger boy on the Wabash, later serving in the various clerical capacities. In March, 1902, he went with the Denver & Rio Grande Western as a clerk in the superintendent's office and in 1904 he returned to the Wabash as chief clerk to the engineer maintenance of way at Detroit, Mich. Mr. Covington then became chief clerk to the consulting engineer of the Wheeling & Lake Erie and the Wabash Pittsburgh Terminal (now the Pittsburgh & West Virginia) at Canton, Ohio, and in 1906 he went with the Colorado & Southern as chief clerk to the superintendent. From 1911 to 1918 he served as trainmaster and assistant superintendent of the C. & S. at Trinidad, Colo., and in the latter year he was advanced to superintendent at Denver, Colo. A year later, he was appointed general superintendent of the Ft. Worth & Denver City

and the Wichita Valley, with headquarters at Wichita Falls. In 1930 his title on the F. W. & D. C. was changed to superintendent.

TRAFFIC

W. S. Wilson, Jr., has been appointed district freight agent of the Pennsylvania at Rochester, N. Y.

J. C. Allen has been appointed general passenger agent of the New York, Susquehanna & Western at Paterson, N. J.

H. M. Braswell has been appointed general freight agent of the Ashley, Drew & Northern, with headquarters at Crossett, Ark.

L. R. Early, commercial agent of the Virginian at Wilson, N. C., has been promoted to general agent at Washington, D. C.

W. Dewey Smith, assistant Florida freight agent of the Central of Georgia, with headquarters at Tampa, Fla., has been transferred to Orlando, Fla.

W. W. Fell, general agent of the Chesapeake & Ohio with headquarters at Atlanta, Ga., has been promoted to division freight agent at Ashland, Ky., and has been succeeded by **Charles N. Page.**

T. H. Alexander, in the soil conservation service, Hot Springs, S. D., has been appointed agricultural agent, Eastern district, of the Union Pacific, with headquarters at Omaha, Neb.

C. E. Smith, office engineer of the Wheeling & Lake Erie, has been appointed industrial agent, with headquarters as before at Cleveland, Ohio, succeeding **A. O. Ellis,** who has retired.

L. W. Shehee has been appointed freight traffic agent of the Atlanta, Birmingham & Coast, with headquarters at Atlanta, Ga., succeeding **E. T. Anderson,** who has entered military service.

C. H. Battle, general agent of the Atlantic Coast Line at Atlanta, Ga., has been appointed assistant general freight agent at Miami, Fla. **E. T. Bowen,** commercial agent at Nashville, Tenn., has been promoted to general agent at Atlanta, Ga.

E. C. Elliott, general passenger agent of the Canadian National, with headquarters at Montreal, Que., retired from active service on October 12, under the company's pension regulations, after 48 years of railroad service.

Albert J. Wyant has been appointed general agent of the Akron, Canton & Youngstown, with headquarters at Pittsburgh, Pa., succeeding **George C. Heidish,** who has been promoted to assistant general freight agent at Akron, Ohio.

H. K. Worsham, district passenger agent of the Kansas City Southern-Louisiana & Arkansas, with headquarters at Shreveport, La., has been promoted to the newly created position of assistant passenger traffic manager, with the same headquarters, and **A. Hammerton,** district passenger agent at New Orleans, La., has been transferred to Shreveport, succeeding Mr. Worsham. **James L. McCall** has been appointed district passenger agent at New Orleans, replacing Mr. Hammerton.

L. W. Moon, general agent of the Texas & Pacific at Atlanta, Ga., has been appointed also general agent at Winston-Salem, N. C., with offices at both points, succeeding **Charles D. Laughlin,** who has been commissioned a first lieutenant in the U. S. Army.

W. W. Duckworth, chief clerk in the freight traffic department of the Missouri-Kansas-Texas at St. Louis, Mo., has been promoted to assistant general freight agent, with the same headquarters, succeeding **Henry J. Carr,** who has been granted a leave of absence for military service.

G. D. Brophy, assistant general agent, rail passenger department of the Canadian Pacific, at Montreal, Que., has been promoted to general agent of that department, succeeding **Fred C. Lydon,** who retired on September 30, after over half a century of service with that road.

George C. Heidish, general agent of the Akron, Canton & Youngstown and the Northern Ohio at Pittsburgh, Pa., has been promoted to assistant general freight agent, with headquarters at Akron, Ohio, and **Albert J. Wyant** has been appointed general agent at Pittsburgh, succeeding Mr. Heidish.

C. G. Magruder, division freight agent of the Pennsylvania at St. Louis, Mo., has been transferred to Pittsburgh, Pa., succeeding **E. W. Saville,** who has been promoted to assistant general freight agent at Pittsburgh, to succeed **E. B. Hankey,** deceased. **J. C. McMichael,** division freight agent at Cincinnati, Ohio, has been promoted to assistant general freight agent at Pittsburgh. **C. R. Burr,** district freight agent at Houston, Tex., has been transferred to Akron, Ohio, to succeed **R. E. Walton,** promoted.

O. M. Stevens, executive representative of the Missouri Pacific at Denver, Colo., has been appointed president of the American Refrigerator Transit Company (owned by the Missouri Pacific and the Wabash), with headquarters at St. Louis, Mo., succeeding **David O. Ouellet,** whose death on August 27 was reported in the *Railway Age* of September 5. **Melvin P. Eckman,** general freight and passenger agent of the Missouri Pacific at Kansas City, Mo., has been advanced to executive representative at Denver, replacing Mr. Stevens, and **E. J. Falk,** executive general agent at San Antonio, Tex., has been appointed general freight and passenger agent at Kansas City, relieving Mr. Eckman. **W. E. Babel,** general agent, freight department at Austin, Tex., has been promoted to executive general agent at San Antonio, succeeding Mr. Falk, and **H. J. Holzmann** has been appointed general agent at San Antonio, replacing Mr. Babel.

Mr. Eckman was born at Osborne, Kan., on January 26, 1893, and entered railway service on August 1, 1909, as a helper on the Missouri Pacific at Osborne, later serving as a telegraph operator and station agent on the Northern Kansas division. On April 1, 1926, he became a traveling passenger agent at Kansas City and in September, 1926, he was appointed traveling freight agent at Hutchinson, Kan. Mr. Eckman was advanced to general agent at Hutchinson on February 1, 1935, and was

Melvin P. Eckman

promoted to assistant general freight agent at Omaha on January 16, 1936. On August 1, 1940, he was appointed general agent at Los Angeles, Cal., and on January 1, 1941, he was advanced to general freight and passenger agent, with headquarters at Kansas City, which position he held until his recent promotion, effective October 1.

ENGINEERING & SIGNALING

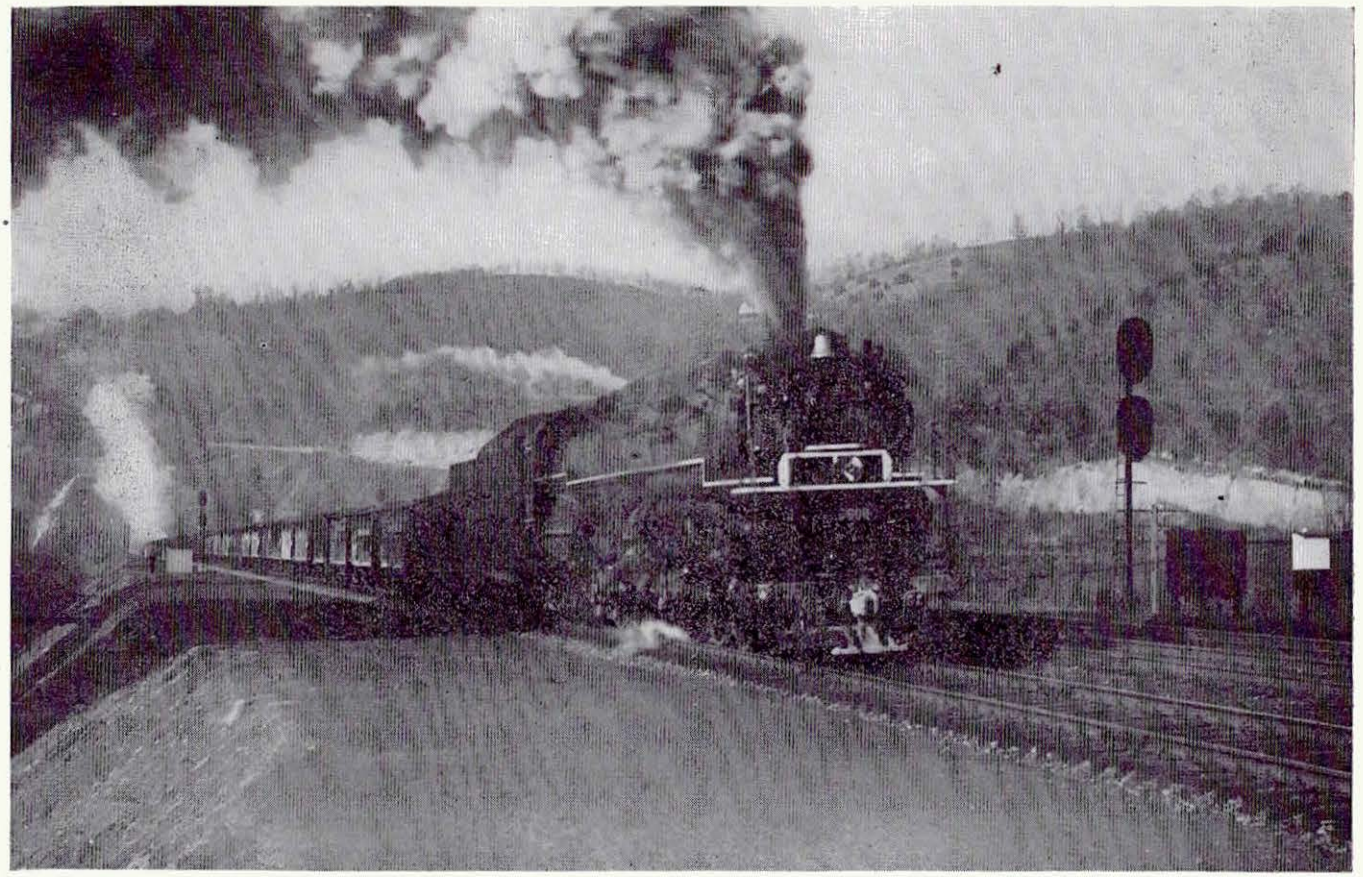
Alfred D. Wolff, Jr., designing engineer of the New York Central lines Buffalo and East, has been appointed research engineer, with headquarters at New York. Mr. Wolff entered railroad service on June 3, 1910, as draftsman in the engineering department of the New York Central at New York, becoming assistant engineer on

Blackstone

Alfred D. Wolff, Jr.

January 1, 1912. From April to December, 1916, he was resident engineer at Poughkeepsie, N. Y., then serving until 1918 as assistant district engineer, Hudson River Connecting road on Castleton bridge cut-off. Mr. Wolff served as assistant district engineer and assistant engineer at Al-

News Department continued on next left-hand page



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LIMA LOCOMOTIVE WORKS LIMA LOCOMOTIVE WORKS INCORPORATED INCORPORATED, LIMA, OHIO

bany, N. Y., from 1918 to 1922, when he became assistant engineer in charge of valuation Order No. 3 work, Buffalo and East, at New York. In 1926 he was appointed assistant engineer, New York terminal district on West Side improvements and in April, 1938, he became designing engineer at New York.

C. M. Duffy, superintendent of telegraph and signals of the Chicago, Rock Island & Pacific, with headquarters at Chicago, has requested on account of his health to be relieved of the responsibilities of that position and has been appointed assistant to superintendent of telegraph and signals, with headquarters at El Reno, Okla., with general supervision of the communication and signal facilities in that territory. **C. R. Swenson,** supervisor of telegraph and signals on the Pennsylvania-Reading Seashore Lines and the Atlantic division of the Pennsylvania, with headquarters at Camden, N. J., has been appointed superintendent of telegraph and signals of the Rock Island, with headquarters at Chicago, succeeding Mr. Duffy. Mr. Swenson was born at Kasota, Minn.,

C. R. Swenson

on June 3, 1898, and graduated in electrical engineering at the University of Minnesota. He entered railway service in 1922 as a signal helper on the Great Northern and then served as maintainer and on construction work, later being promoted to foreman of signal construction. In 1926, he went with the Pennsylvania during the installation of automatic train control on the Columbus division, later being promoted to assistant foreman and foreman. In 1935, he was appointed inspector. During the reconstruction of signaling facilities on the territories being electrified, Mr. Swenson served in various capacities, including inspector of signal tests. In May, 1940, he was appointed supervisor of telegraph and signals on the Pennsylvania-Reading Seashore Lines and of the Atlantic division of the Pennsylvania, which position he held until his recent appointment as superintendent of telegraph and signals of the Rock Island.

Frank R. Paisley, engineer maintenance of way of the Pittsburgh & Lake Erie, has been promoted to assistant chief engineer, with headquarters as before at Pittsburgh, Pa., succeeding **Charles G. Stewart,** whose promotion to general manager is reported elsewhere in these columns. **John P. Ensign,** supervisor of track of the New York Central at New York, has been appointed engineer maintenance of way of the P. & L. E., replacing Mr. Paisley.

Raymond C. Lowrey, resident engineer of the Missouri & Arkansas, has been appointed engineer maintenance of way, with headquarters as before at Harrison, Ark., a change of title.

V. O. Smeltzer, assistant signal engineer of the Atchison, Topeka & Santa Fe, with headquarters at Amarillo, Tex., has been appointed centralized traffic control engineer of an installation at Los Angeles, Cal., and has been succeeded by **Robert B. McKithan,** signal supervisor at Temple, Tex.

MECHANICAL

K. G. Carnes has been appointed road foreman of engines of the Southern, with headquarters at Spencer, N. C.

J. M. Nickisher, general car inspector of the Lehigh Valley at Sayre, Pa., has been promoted to superintendent car department at Bethlehem, Pa., succeeding **A. J. Ferentz,** whose appointment as assistant superintendent at Wilkes-Barre, Pa., is noted elsewhere in these columns.

T. C. Cory has been appointed master mechanic of the Western division of the Texas & Pacific, with headquarters at Ft. Worth, Tex., succeeding **J. E. Friend,** who has been granted a leave of absence to serve as assistant to associate director, Office of Defense Transportation.

H. S. Keppelman, superintendent car department of the Reading, with headquarters at Reading, Pa., has been granted a leave of absence to accept appointment as deputy associate in charge of freight and passenger car repairs of the Division of Railway Transport, Office of Defense Transportation. **H. F. Lyons,** general car inspector at Philadelphia, Pa., has been appointed acting superintendent car department.

F. E. Molloy, master mechanic of the San Joaquin division of the Southern Pacific, with headquarters at Bakersfield, Cal., has been promoted to assistant superintendent of motive power at Los Angeles, Cal., succeeding **F. E. Russell, Jr.,** who has been commissioned in the U. S. Army.

G. C. Bogart, assistant master mechanic at West Oakland, Cal., has been advanced to master mechanic succeeding Mr. Molloy.

John P. Laux, superintendent motive power of the Lehigh Valley, with headquarters at Sayre, Pa., has been promoted to assistant to vice-president and general manager, with headquarters at Bethlehem, Pa. **John R. Grove,** assistant superintendent motive power, has been promoted to superintendent motive power, with headquarters as before at Bethlehem. **Alexander H. Mitchell,** superintendent of shops at Sayre, has been appointed superintendent system shops and enginehouse, with the same headquarters.

OBITUARY

A. O. Ellis, manager industrial development department, Wheeling & Lake Erie, Cleveland, Ohio, who retired on September 30, died the same evening at his home in Cleveland.

Glenn C. Hower, who retired in 1932 as division storekeeper of the Tacoma division of the Northern Pacific, with headquarters at Seattle, Wash., died on October 1 in the Northern Pacific hospital at Tacoma, Wash., after an illness of about a year.

Charles K. Lawrence, who retired as chief engineer of the Central of Georgia on June 1, 1926, died at his home in Savannah, Ga., on September 12, after a short illness, at the age of 86. Mr. Lawrence entered the service of the Central of Georgia in 1899 as engineer of construction and served as chief engineer in charge of the engineering department for 20 years.

Samuel H. Cady, who retired recently as vice-president and general counsel of the Chicago & North Western and the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at Chicago, died on October 3 at Green Bay, Wis., after an illness of several months. A photograph and biography of Mr. Cady were published in the *Railway Age* of July 4, page 41, following his retirement.

Bert E. Palmer, who retired in 1936 as manager of the Northern Pacific Terminal Company of Oregon, with headquarters at Portland, Ore., died at his home in that city on October 2. Mr. Palmer at one time was general superintendent of the Western district of the Northern Pacific, and later superintendent of the First division of the Oregon-Washington Railroad & Navigation Company (now part of the Union Pacific). He resigned from the latter position on May 1, 1920, to become manager of the Northern Pacific Terminal Company of Oregon.

Okane J. McGillis, advertising agent of the Great Northern, with headquarters at St. Paul, Minn., whose death on September 27 was reported in the *Railway Age* of October 3, was born in 1892 and entered railway service in 1914 when he became associated with the Glacier Park Hotel Company (a Great Northern subsidiary). He was later promoted to the passenger department and in 1929 was appointed advertising agent, which position he held until his death. Mr. McGillis was prominent nationally in railroad advertising circles and was president of the St. Paul Advertising Club.

BRITISH TRAVEL LUXURIES HIT.—Because in the past twelv months a million towels have been taken from trains on British railways, they hereafter will be supplied only on sleeping cars, Modern Transport (London) reports. Reserve stocks of glassware and drinking cups are seriously depleted, too, and travelers are being urged to carry their own drinking utensils. Sixty-four thousand cups are required each week to replace breakage at station lunch rooms, it is said.

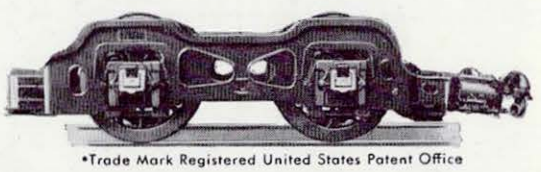
Table of Revenues and Expenses Begins on next left-hand page

THE PRESENT EMERGENCY DEMANDS HEAVIER LOADS and HIGHER SPEEDS from EXISTING LOCOMOTIVES

THE FRANKLIN SYSTEM OF Steam Distribution

This is a critical year. Power to move more tonnage is sorely needed.

The Franklin System of Steam Distribution increases the capacity of the locomotive at least a third as well as its availability. Add the Locomotive Booster* for the equivalent of another driving axle to accelerate and start heavier loads.



*Trade Mark Registered United States Patent Office

THE LOCOMOTIVE BOOSTER

FRANKLIN RAILWAY SUPPLY COMPANY, INC. NEW YORK CHICAGO

In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1942

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1942	1941
Akron, Canton & Youngstown	Aug.	171	$272,229	$128	$287,339	$80,119	$30,284	$14,560	$78,639	$214,469	74.6	$72,870	$55,525	$38,337	$64,612
	8 mos.	171	2,100,713	661	2,189,496	403,870	234,678	121,169	637,442	1,489,258	68.0	700,238	495,707	382,371	499,034
Alton	Aug.	959	2,105,032	567,863	2,928,105	278,466	311,345	46,769	864,829	1,605,877	54.8	1,322,228	803,986	626,307	256,404
	8 mos.	959	14,179,432	3,163,237	19,352,673	2,025,965	2,633,210	397,024	6,816,096	12,640,837	65.3	6,711,836	4,340,289	2,774,483	1,275,295
Atchison, Topeka & Santa Fe System	Aug.	13,362	26,441,215	4,828,569	33,197,990	3,509,489	4,650,892	441,687	8,102,521	17,140,044	51.6	16,057,946	7,964,214	7,588,674	5,275,455
	8 mos.	13,364	178,379,640	28,166,459	220,410,892	23,063,146	34,860,400	3,826,365	61,326,397	126,604,221	57.4	93,806,671	45,766,083	44,061,972	25,618,916
Atlanta & West Point	Aug.	93	211,965	106,336	348,659	33,765	33,923	10,055	101,203	192,057	55.1	156,602	84,690	67,954	29,360
	8 mos.	93	1,601,030	580,762	2,418,492	216,918	278,423	73,980	788,944	1,469,256	60.8	949,236	511,743	366,374	126,240
Western of Alabama	Aug.	133	273,383	107,834	413,505	35,767	45,317	9,030	113,891	216,127	52.3	197,378	101,717	96,431	32,949
	8 mos.	133	1,816,547	598,115	2,652,241	239,229	340,509	72,078	804,441	1,558,161	58.7	1,094,080	556,736	512,315	163,085
Atlanta, Birmingham & Coast	Aug.	639	511,109	42,529	579,241	64,766	67,672	25,802	201,192	377,582	65.2	201,659	73,096	41,663	70,364
	8 mos.	639	3,227,447	269,985	3,696,687	445,048	509,964	211,318	1,469,061	2,776,820	75.1	919,867	500,724	236,931	158,037
Atlantic Coast Line	Aug.	5,008	6,799,913	2,177,809	9,493,852	669,851	1,359,654	162,908	2,675,425	5,159,675	54.3	4,334,177	1,334,177	1,168,481	884,449
	8 mos.	5,008	51,217,182	14,901,175	70,335,196	5,034,533	10,912,156	1,419,964	21,189,341	40,867,397	58.1	29,467,799	15,912,799	13,788,571	8,372,043
Charleston & Western Carolina	Aug.	343	316,432	11,964	335,440	35,013	44,829	9,866	100,127	195,782	58.4	139,658	54,658	56,727	63,095
	8 mos.	343	2,464,479	72,629	2,588,624	270,034	365,447	80,235	786,537	1,552,352	60.0	1,036,272	606,272	586,001	614,617
Baltimore & Ohio	Aug.	6,248	23,921,277	2,686,785	27,859,819	2,704,137	5,289,092	451,511	8,336,664	17,715,409	63.6	10,144,410	6,428,731	5,712,043	5,903,036
	8 mos.	6,258	169,990,482	15,789,998	194,831,683	17,151,050	41,674,519	3,661,535	63,286,155	132,312,593	67.9	62,519,090	41,496,910	37,005,679	32,991,383
Staten Island Rapid Transit	Aug.	24	163,217	107,899	283,149	15,898	25,435	1,103	90,852	149,177	52.7	133,972	105,818	90,177	—7,281
	8 mos.	24	859,241	672,181	1,604,056	118,355	207,546	9,616	720,138	1,168,970	72.9	435,086	212,320	131,187	—115,398
Bangor & Aroostook	Aug.	603	222,111	74,532	326,145	106,552	93,427	5,939	119,327	352,586	108.1	—26,441	—37,497	5,445	19,856
	8 mos.	603	3,910,766	359,124	4,467,335	789,262	755,973	48,656	1,203,252	3,010,706	67.4	1,456,629	792,614	940,660	926,134
Bessemer & Lake Erie	Aug.	214	2,360,520	1,113	2,374,925	171,362	534,365	12,482	333,887	1,087,017	45.8	1,287,908	372,545	441,335	1,107,684
	8 mos.	214	14,099,932	6,850	14,217,356	1,213,099	4,528,524	108,368	2,393,395	8,555,054	60.2	5,662,302	1,645,089	2,321,564	5,710,870
Boston & Maine	Aug.	1,860	4,688,414	1,727,341	7,007,239	844,404	959,865	68,810	2,171,442	4,243,831	60.6	2,763,408	1,695,147	1,444,752	949,343
	8 mos.	1,864	36,629,011	9,192,718	50,247,713	5,998,373	7,246,815	568,859	16,916,044	32,280,881	64.2	17,966,832	11,315,970	8,964,724	6,961,311
Burlington, Rock Island	Aug.	228	154,588	43,618	209,250	18,980	23,281	2,452	75,588	132,791	63.5	76,459	65,528	44,300	—2,415
	8 mos.	239	745,182	280,799	1,099,052	156,033	155,788	19,505	443,996	866,433	78.8	232,619	154,248	88,467	—28,001
Cambria & Indiana	Aug.	37	177,751	.....	177,817	18,126	62,740	468	18,706	106,448	59.86	71,369	—20,039	56,550	83,813
	8 mos.	37	1,412,746	.....	1,413,296	79,412	481,387	3,898	146,026	762,866	53.98	650,430	—35,148	553,195	573,872
Canadian Pacific Lines in Maine	Aug.	234	287,538	89,724	401,683	71,150	50,429	6,864	106,473	242,180	60.3	159,503	143,827	127,074	—12,007
	8 mos.	234	2,759,822	428,291	3,337,275	447,072	443,835	54,151	1,003,363	2,003,839	60.0	1,333,436	1,207,687	1,005,198	555,182
Canadian Pacific Lines in Vermont	Aug.	90	84,722	34,013	133,145	34,703	26,831	2,485	86,735	154,273	115.9	—21,128	—30,188	—57,202	—42,334
	8 mos.	90	764,584	87,180	947,946	210,205	198,046	19,482	638,482	1,094,366	115.4	—146,420	—209,504	—409,822	—267,650
Central of Georgia	Aug.	1,815	1,834,463	459,270	2,461,946	250,459	367,622	59,282	776,953	1,556,665	63.2	905,281	699,590	706,383	448,898
	8 mos.	1,815	13,858,374	2,634,530	17,849,267	1,885,772	2,810,802	483,526	6,294,244	12,268,439	68.7	5,580,828	4,381,819	4,234,292	2,636,361
Central of New Jersey	Aug.	661	4,172,736	698,363	5,169,010	677,031	788,805	45,190	1,870,070	3,494,231	67.6	1,674,779	1,179,320	899,795	968,541
	8 mos.	661	31,018,038	4,228,120	37,302,243	3,981,412	6,267,244	379,283	14,307,179	25,806,772	69.2	11,495,471	7,697,826	5,320,621	3,447,780
Central Vermont	Aug.	422	554,117	123,000	717,810	99,123	99,114	11,179	269,828	504,606	70.3	213,204	174,527	117,232	183,439
	8 mos.	422	4,544,498	487,000	5,351,018	683,432	787,057	88,775	2,086,219	3,825,465	71.5	1,525,553	1,270,729	916,692	1,062,865
Chesapeake & Ohio	Aug.	3,110	14,971,607	1,094,099	16,669,536	1,358,661	2,603,954	216,705	3,607,077	8,167,027	49.0	8,502,509	2,379,542	2,682,002	4,777,303
	8 mos.	3,120	106,677,041	6,084,842	116,756,121	10,921,918	20,078,555	1,769,632	26,988,120	62,643,614	53.7	54,112,507	18,449,839	20,392,907	27,633,491
Chicago & Eastern Illinois	Aug.	913	1,620,529	401,098	2,202,854	204,189	329,918	57,376	658,902	1,330,136	60.4	872,718	572,718	427,476	173,145
	8 mos.	923	10,823,375	2,349,952	14,520,927	1,505,010	2,537,236	477,879	5,136,821	10,277,260	70.8	4,243,667	2,893,667	1,865,502	1,413,478
Chicago & Illinois Midland	Aug.	131	488,006	992	512,308	66,079	75,102	20,931	121,265	305,185	59.6	207,123	80,000	68,157	105,891
	8 mos.	131	3,837,938	6,479	4,024,829	454,500	661,997	172,898	995,609	2,460,245	61.1	1,564,584	609,518	537,608	775,920
Chicago & North Western	Aug.	8,237	9,654,954	2,074,355	12,767,791	1,980,710	2,011,646	195,791	3,839,391	8,421,599	66.0	4,346,192	2,661,543	2,483,927	2,349,149
	8 mos.	8,262	67,137,401	12,241,532	87,100,560	11,252,556	15,708,354	1,563,850	29,659,227	61,288,681	70.4	25,811,879	15,974,747	14,604,170	12,066,431
Chicago, Burlington & Quincy	Aug.	9,085	12,429,083	1,934,577	15,546,252	2,203,144	2,012,797	245,439	3,849,309	8,734,519	56.2	6,811,733	3,493,213	3,240,697	2,448,330
	8 mos.	9,089	79,661,484	10,717,980	99,106,546	12,358,116	15,142,319	2,024,084	29,385,530	62,082,524	62.6	37,024,022	19,167,538	17,805,329	12,412,108
Chicago Great Western	Aug.	1,502	1,897,874	161,475	2,196,377	247,133	258,963	59,293	693,332	1,320,532	60.1	875,845	421,424	236,489	307,935
	8 mos.	1,502	14,141,181	861,449	16,028,396	1,838,713	2,175,633	491,319	5,601,730	10,603,821	66.2	5,424,575	3,125,615	1,679,056	1,844,584
Chicago, Indianapolis & Louisville	Aug.	549	820,148	70,987	957,051	114,517	181,719	29,695	296,844	658,217	68.8	298,834	248,388	194,601	213,833
	8 mos.	549	6,456,621	450,699	7,431,338	775,665	1,359,253	237,480	2,435,713	5,096,463	68.6	2,334,875	1,937,013	1,432,995	1,185,130

Table continued on next left-hand page

FUEL

a strategic material

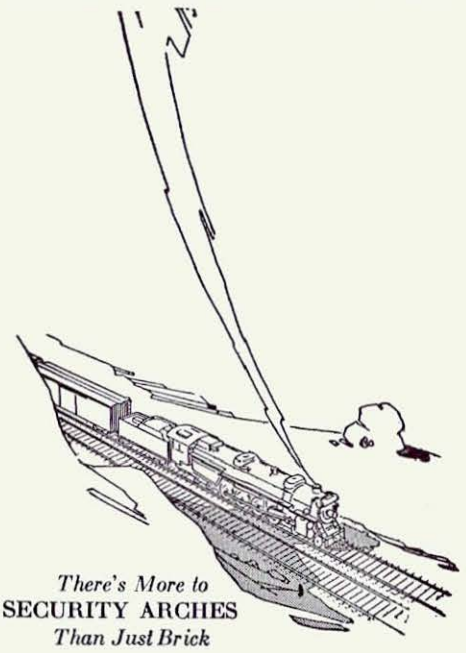
CONSERVED

with Security Sectional Arches

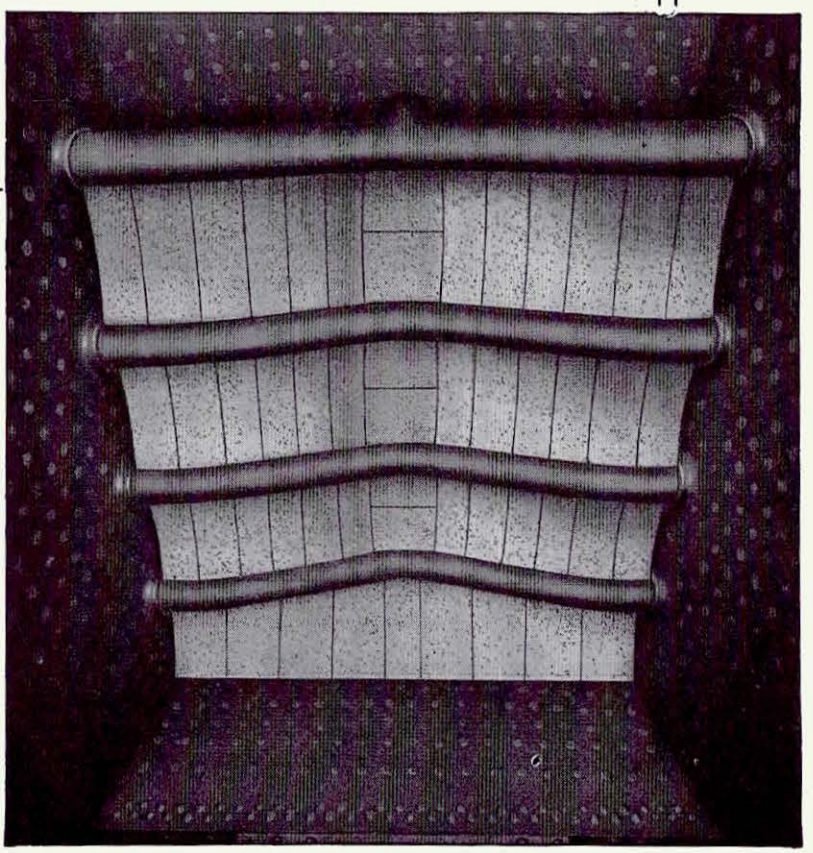
Today, more than ever, fuel is one of our strategic materials. Making every pound of fuel produce the maximum amount of steam not only conserves this strategic material but also the cars required to transport it.

For over 32 years, Security Sectional Arches have been saving fuel on all types of steam locomotives.

But experience has proved that only with a *complete* Arch can maximum fuel economy be realized.



There's More to
SECURITY ARCHES
Than Just Brick



HARBISON-WALKER REFRACTORIES CO.

Refractory Specialists

AMERICAN ARCH CO.
INCORPORATED
60 EAST 42nd STREET, NEW YORK, N. Y.
Locomotive Combustion Specialists

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of: Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income: 1942	1941
Chicago, Milwaukee, St. Paul & Pacific	Aug.	10,821	$12,628,000	$1,723,925	$15,705,896	$2,620,807	$2,228,927	$249,240	$4,590,916	$10,195,514	64.9	$5,510,382	$3,156,382	$2,972,108	$3,575,268
	8 mos.	10,821	91,196,565	9,621,473	110,420,836	16,655,928	16,834,400	1,900,780	35,937,793	75,262,355	68.2	35,158,481	21,527,481	19,146,584	17,990,893
Chicago, Rock Island & Pacific	Aug.	7,925	9,409,511	2,294,870	12,513,643	1,312,081	1,583,094	290,573	3,463,359	7,078,824	56.6	5,434,819	4,388,843	3,977,087	2,035,937
	8 mos.	7,928	63,649,031	13,201,959	82,469,445	8,947,700	12,288,323	2,300,017	26,513,390	53,522,925	64.9	28,946,520	24,129,496	21,270,276	12,531,179
Chicago, St. Paul, Minneapolis & Omaha	Aug.	1,629	1,613,132	269,318	2,020,516	256,239	284,657	40,774	761,217	1,410,061	69.8	610,455	481,712	400,690	339,876
	8 mos.	1,629	12,230,035	1,571,550	14,773,390	1,894,974	2,451,127	331,164	6,208,596	11,445,106	77.5	3,328,284	2,321,183	1,620,415	980,839
Clinchfield Railroad	Aug.	308	1,043,085	9,613	1,059,602	64,543	123,126	21,060	196,573	419,825	39.6	639,777	493,063	511,526	482,542
	8 mos.	308	7,994,920	48,651	8,093,141	451,100	1,120,843	170,288	1,579,849	3,471,873	42.9	4,621,268	3,741,296	3,808,173	3,720,758
Colorado & Southern	Aug.	755	720,936	177,367	972,647	118,224	148,153	16,340	294,749	613,744	63.1	358,903	238,972	213,009	176,460
	8 mos.	755	4,916,085	1,016,088	6,434,569	652,119	1,088,738	119,721	2,189,825	4,315,638	67.1	2,118,931	1,592,834	1,422,599	641,199
Fort Worth & Denver City	Aug.	804	775,206	259,607	1,139,919	72,077	106,236	24,328	271,485	515,534	45.2	624,385	491,819	427,102	138,063
	8 mos.	804	4,241,063	1,460,231	6,512,959	579,185	844,733	175,025	1,827,486	3,761,394	57.8	2,751,565	2,345,699	2,060,313	651,399
Colorado & Wyoming	Aug.	42	99,772	.....	156,112	14,751	11,894	857	49,096	81,120	51.9	74,992	41,109	40,357	32,623
	8 mos.	42	765,545	.....	1,206,296	122,743	104,907	7,047	412,339	682,391	56.5	523,905	202,831	198,784	282,862
Columbus & Greenville	Aug.	168	107,520	5,166	120,427	21,951	18,742	4,775	38,180	95,440	79.3	24,987	9,558	10,984	13,282
	8 mos.	168	779,694	27,078	859,508	185,090	143,909	36,378	287,767	745,956	86.8	113,552	15,935	30,318	90,545
Delaware & Hudson	Aug.	849	3,790,377	200,583	4,108,309	415,289	774,651	45,527	1,228,351	2,574,148	62.7	1,534,161	786,971	742,231	1,078,465
	8 mos.	849	28,248,795	995,350	29,974,829	2,945,150	5,807,916	357,226	9,574,183	19,530,965	65.2	10,443,864	6,360,448	5,833,548	5,453,372
Delaware, Lackawanna & Western	Aug.	985	4,776,870	926,040	6,317,684	723,829	977,240	101,585	2,220,914	4,186,803	66.3	2,130,881	997,681	979,194	1,042,808
	8 mos.	985	36,899,558	5,847,803	47,151,666	4,382,484	7,304,149	873,970	18,031,108	31,873,621	67.6	15,278,045	7,413,845	7,123,658	7,340,732
Denver & Rio Grande Western	Aug.	2,405	4,642,179	509,775	5,365,563	432,114	765,073	89,907	1,355,883	2,791,640	52.0	2,573,923	2,324,134	2,225,720	674,286
	8 mos.	2,422	27,421,200	2,444,288	31,243,139	2,556,464	5,745,825	709,970	9,473,168	19,480,443	62.4	11,762,696	9,880,167	9,545,937	1,473,153
Denver & Salt Lake	Aug.	232	236,758	7,576	254,968	30,853	46,570	2,404	72,149	162,276	63.6	92,692	64,459	118,770	105,400
	8 mos.	232	1,548,049	45,050	1,668,207	244,681	358,061	20,817	552,567	1,255,637	75.3	412,570	200,531	605,637	406,880
Detroit & Mackinac	Aug.	242	84,291	6,340	99,507	16,059	13,564	787	25,181	58,691	59.0	40,816	36,725	32,772	2,299
	8 mos.	242	507,012	31,139	610,878	103,748	104,769	5,957	210,322	450,736	73.8	160,142	130,839	102,338	16,439
Detroit & Toledo Shore Line	Aug.	50	332,479	.....	333,103	32,403	26,357	8,705	82,380	157,757	47.4	175,346	108,787	64,856	68,103
	8 mos.	50	2,757,982	.....	2,766,846	257,794	208,342	72,813	727,641	1,330,693	48.1	1,436,153	912,086	492,170	647,526
Detroit, Toledo & Ironton	Aug.	465	601,445	699	637,873	87,613	112,761	13,707	157,782	393,922	61.8	243,951	127,492	139,155	170,628
	8 mos.	465	5,238,697	3,675	5,527,347	611,342	889,209	111,321	1,392,350	3,185,928	57.6	2,341,419	1,345,020	1,267,068	2,025,259
Duluth, Missabe & Iron Range	Aug.	544	5,357,675	3,012	6,233,021	303,296	356,957	4,121	864,995	1,564,781	25.1	4,668,240	1,102,625	1,102,695	3,200,779
	8 mos.	543	23,947,287	15,358	27,904,496	2,151,614	2,747,417	34,023	4,605,468	9,825,996	35.2	18,078,500	4,395,973	4,385,370	10,627,849
Duluth, Winnipeg & Pacific	Aug.	175	174,000	3,200	181,900	45,302	23,367	2,044	60,854	135,200	74.3	46,700	34,346	15,426	11,060
	8 mos.	175	1,371,700	9,600	1,408,800	271,997	201,421	16,187	527,049	1,044,182	74.1	364,618	255,922	94,319	45,752
Elgin, Joliet & Eastern	Aug.	392	2,566,093	46	2,935,381	225,826	543,137	16,591	917,739	1,741,472	59.3	1,193,909	341,902	241,514	736,942
	8 mos.	392	19,612,612	132	22,170,248	1,615,684	4,241,847	132,425	7,445,414	13,835,052	62.4	8,335,196	2,846,573	1,864,855	4,767,674
Erie	Aug.	2,243	10,196,339	741,334	11,615,480	1,173,750	1,904,562	182,157	3,626,997	7,226,003	62.2	4,389,477	2,937,829	2,493,426	2,079,425
	8 mos.	2,250	76,858,057	4,681,790	86,672,909	8,215,424	14,344,889	1,551,447	29,132,925	55,851,200	64.4	30,821,709	18,820,126	15,563,089	14,383,082
Florida East Coast	Aug.	685	1,144,898	542,929	1,794,823	207,798	225,698	35,639	447,220	979,258	54.6	815,565	738,233	740,468	—56,245
	8 mos.	685	7,373,693	4,114,492	12,493,906	1,242,908	1,483,360	267,470	3,647,986	7,306,185	58.5	5,187,721	4,571,336	4,269,431	1,203,025
Georgia Railroad	Aug.	329	648,759	178,397	864,823	70,447	88,159	20,913	252,849	444,814	51.43	420,009	395,009	379,427	118,944
	8 mos.	329	4,623,050	748,858	5,640,542	445,328	618,651	170,004	1,864,206	3,226,079	57.2	2,414,463	2,236,348	2,149,006	792,603
Georgia & Florida	Aug.	408	186,025	5,246	196,334	38,362	21,388	10,098	53,934	129,211	65.8	67,123	57,841	45,419	53,638
	8 mos.	408	1,136,053	29,452	1,203,191	284,634	157,402	80,023	393,385	966,414	80.3	236,777	164,201	97,843	57,881
Grand Trunk Western	Aug.	1,026	2,472,000	185,000	2,808,000	337,235	422,990	38,911	952,572	1,836,390	65.4	971,610	824,703	761,768	467,682
	8 mos.	1,026	17,255,000	1,073,000	19,550,000	2,595,917	3,567,965	309,360	7,533,279	14,647,238	74.9	4,902,762	3,733,455	3,181,531	4,549,773
Canadian National Lines in New England	Aug.	172	93,000	12,900	115,000	54,900	11,972	2,629	65,724	144,551	125.7	—29,551	—48,071	—91,131	—68,241
	8 mos.	172	1,364,400	42,500	1,527,500	410,158	205,342	20,567	730,252	1,459,188	95.5	68,312	—79,848	—541,552	—403,255
Great Northern	Aug.	8,117	14,305,581	831,681	16,404,827	1,806,484	2,066,396	202,107	3,751,012	8,172,008	49.8	8,232,819	3,977,531	3,824,739	3,915,139
	8 mos.	8,082	86,104,633	4,804,096	98,519,200	12,404,704	17,003,620	1,658,863	26,121,533	59,754,347	60.7	38,764,853	21,050,519	20,169,714	18,710,769
Green Bay & Western	Aug.	234	194,949	456	199,583	49,179	28,280	7,426	55,141	145,892	73.0	53,691	27,742	23,461	20,448
	8 mos.	234	1,448,335	2,900	1,496,162	287,937	186,104	71,951	445,141	1,034,411	69.1	461,751	291,849	224,943	201,799
Gulf & Ship Island	Aug.	259	163,489	30,711	211,749	43,667	20,867	2,796	79,015	154,232	72.8	57,517	42,142	27,034	14,442
	8 mos.	259	1,233,441	162,251	1,511,534	240,361	191,871	24,608	569,949	1,081,513	71.6	430,021	287,131	172,494	45,612

Table continued on next left-hand page

Superheaters *Last Longer*

when they are used as Superheaters

Large quantities of moisture carryover, due to high boiler water, make an evaporator out of your superheater.

Such treatment will quickly fill the steam passages with scale, with the resultant shortening of the life of the superheater and reduction in power, as well as increasing fuel and water consumption.

Be sure your locomotive superheaters are used as superheaters.

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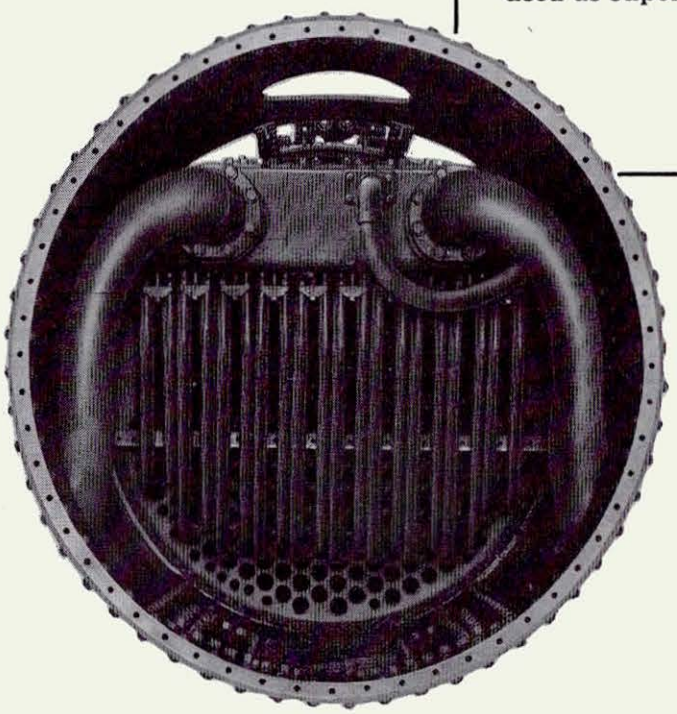
TO KEEP 'EM EFFICIENT



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SUPERHEATERS • FEEDWATER HEATERS
AMERICAN THROTTLES • STEAM DRYERS
EXHAUST STEAM INJECTORS • PYROMETERS

THE SUPERHEATER COMPANY

Representative of
AMERICAN THROTTLE COMPANY, INC.
60 East 42nd Street, NEW YORK
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Montreal, Canada
THE SUPERHEATER COMPANY, LTD.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income 1942	Net railway operating income 1941
Gulf, Mobile & Ohio	Aug.	1,969	$2,958,034	$114,471	$3,167,973	$413,263	$416,577	$81,606	$809,226	$1,815,214	57.3	$1,352,759	$802,859	$547,809	$388,840
	8 mos.	1,969	19,158,376	671,522	20,532,954	2,684,047	3,096,515	692,745	5,624,667	12,887,824	62.8	7,645,130	4,653,730	3,266,435	2,464,014
Illinois Central	Aug.	4,883	13,018,412	1,870,151	15,708,450	2,221,088	3,025,050	204,812	4,327,101	10,254,274	65.3	5,454,176	2,427,883	2,010,680	1,711,980
	8 mos.	4,934	93,848,963	11,658,268	111,893,183	12,516,245	22,673,834	1,765,143	33,740,702	74,307,794	66.4	37,585,389	18,008,912	15,376,214	15,015,161
Yazoo & Mississippi Valley	Aug.	1,525	2,960,249	231,694	3,302,775	281,077	415,453	33,515	800,819	1,607,942	48.7	1,694,833	1,508,096	1,369,972	484,083
	8 mos.	1,546	19,241,238	1,272,929	21,304,465	1,408,453	2,746,312	288,530	5,902,128	10,888,735	51.1	10,415,730	9,079,977	8,177,923	2,249,137
Illinois Central System	Aug.	6,408	15,978,661	2,101,845	19,011,225	2,502,165	3,440,503	238,327	5,127,920	11,862,216	62.4	7,149,009	3,929,114	3,385,565	2,203,976
	8 mos.	6,480	113,090,201	12,931,197	133,197,648	13,924,698	25,420,146	2,053,673	39,642,830	85,196,529	64.0	48,001,119	27,041,986	23,596,440	17,331,601
Illinois Terminal	Aug.	476	626,110	132,185	845,988	60,019	82,063	18,708	251,797	432,931	51.17	413,057	272,825	244,417	213,694
	8 mos.	476	4,275,515	840,009	5,657,179	483,414	660,295	150,094	1,732,326	3,245,438	57.37	2,411,741	1,615,326	1,435,387	1,096,176
Kansas City Southern	Aug.	880	2,936,778	268,512	3,393,955	668,398	346,982	58,093	764,728	1,925,328	56.7	1,468,627	760,627	515,715	387,423
	8 mos.	880	18,336,992	1,392,494	21,068,143	2,869,921	2,707,445	457,576	5,145,885	11,821,178	56.1	9,246,965	5,908,965	4,342,944	2,760,711
Kansas, Oklahoma & Gulf	Aug.	328	294,937	1,070	298,559	29,557	15,653	10,037	66,562	131,599	44.1	166,960	101,763	79,477	61,356
	8 mos.	328	1,894,407	5,573	1,921,031	189,171	106,868	77,547	467,393	929,971	48.4	991,060	612,895	446,710	562,900
Lake Superior & Ishpeming	Aug.	156	256,286	72	343,203	41,817	41,173	717	56,864	147,692	43.0	195,511	25,646	32,662	—41,505
	8 mos.	156	1,832,419	533	2,353,357	258,985	314,676	5,294	430,112	1,069,718	45.5	1,283,639	505,730	559,460	773,940
Lehigh & Hudson River	Aug.	96	302,419	10,550	316,714	41,381	28,113	4,315	82,080	162,635	51.4	154,079	59,184	24,042	28,176
	8 mos.	96	2,291,572	25,670	2,332,207	241,694	239,315	35,223	639,162	1,211,853	52.0	1,120,354	542,782	283,846	229,587
Lehigh & New England	Aug.	190	630,244	.....	633,554	41,322	112,077	6,485	157,776	333,294	52.6	300,260	168,242	180,266	117,633
	8 mos.	190	4,083,503	.....	4,107,279	333,920	814,745	57,969	1,154,259	2,500,386	60.9	1,606,893	882,475	984,224	983,306
Lehigh Valley	Aug.	1,262	6,480,878	419,019	7,313,946	616,888	1,063,930	100,850	2,421,319	4,366,305	59.7	2,947,641	1,736,966	1,340,706	1,155,745
	8 mos.	1,263	43,728,797	2,295,708	48,724,359	4,499,715	7,801,571	843,627	17,858,727	32,260,295	66.2	16,464,064	10,217,493	7,416,866	7,393,879
Louisiana & Arkansas	Aug.	877	1,248,452	88,780	1,379,928	284,784	138,853	30,967	309,310	810,167	58.7	569,761	228,028	147,032	211,679
	8 mos.	877	8,421,297	563,776	9,348,561	1,561,067	1,129,884	252,406	2,225,356	5,535,215	59.2	3,813,346	2,135,442	1,612,066	1,429,101
Louisville & Nashville	Aug.	4,751	12,064,065	2,391,114	15,204,268	1,313,438	2,415,918	186,716	4,260,133	8,611,183	56.6	6,593,085	1,488,937	1,677,584	2,689,162
	8 mos.	4,792	87,114,473	12,970,635	105,427,895	9,582,879	18,268,386	1,558,914	31,542,284	64,020,833	60.7	41,407,062	12,095,057	13,381,974	16,413,101
Maine Central	Aug.	991	1,010,365	302,117	1,416,992	203,685	260,806	11,754	462,985	982,539	69.3	434,453	230,398	225,184	285,294
	8 mos.	991	9,209,170	1,446,627	11,462,868	1,593,835	2,139,564	99,663	3,894,533	8,069,678	70.4	3,393,190	1,992,497	1,750,993	1,978,380
Midland Valley	Aug.	352	117,929	7	120,401	23,651	10,321	2,019	36,774	77,802	64.6	42,599	30,959	21,641	57,492
	8 mos.	352	930,961	64	948,867	147,433	76,907	19,737	292,349	587,031	61.9	361,836	256,580	175,927	235,241
Minneapolis & St. Louis	Aug.	1,409	1,113,470	28,845	1,179,141	170,726	149,694	56,895	356,018	776,199	65.8	402,942	342,828	304,740	247,258
	8 mos.	1,409	7,996,300	181,326	8,447,490	1,284,574	1,248,758	454,871	2,732,318	6,074,214	71.9	2,373,276	1,915,982	1,651,885	880,400
Minneapolis, St. Paul & Sault Ste. Marie	Aug.	4,277	3,466,287	176,037	3,906,685	620,975	568,343	68,540	1,303,669	2,676,456	68.5	1,230,229	785,508	722,266	1,130,719
	8 mos.	4,277	23,903,355	908,854	26,520,258	3,894,510	4,481,088	554,598	9,848,889	19,651,534	74.1	6,868,724	446,736	3,931,340	3,682,808
Duluth, South Shore & Atlantic	Aug.	550	361,729	17,346	407,045	93,768	46,876	8,219	139,468	295,370	72.6	111,675	91,086	83,511	117,880
	8 mos.	550	2,423,792	105,215	2,702,461	478,318	420,001	67,141	946,294	1,966,398	72.8	736,063	588,250	539,808	392,328
Spokane International	Aug.	152	173,408	1,890	182,493	30,973	12,730	2,699	37,606	88,727	48.6	93,766	53,218	41,830	24,000
	8 mos.	152	863,409	12,676	937,181	152,111	68,411	21,018	241,347	519,852	55.5	417,329	267,388	221,813	125,279
Mississippi Central	Aug.	158	148,922	3,971	154,559	27,966	16,419	8,169	32,539	89,033	57.6	65,526	55,409	45,100	6,496
	8 mos.	158	943,199	27,424	982,605	93,398	114,328	64,906	227,523	636,368	64.8	346,237	288,708	232,365	121,566
Missouri & Arkansas	Aug.	365	137,240	3,073	146,704	40,209	16,436	8,616	45,498	117,532	80.1	29,172	23,998	11,737	8,682
	8 mos.	365	978,015	16,536	1,056,530	204,944	114,909	62,418	369,849	798,006	75.5	258,524	137,984	47,009	56,465
Missouri-Illinois	Aug.	172	304,049	333	306,291	31,569	19,505	3,159	66,329	127,112	41.5	179,179	88,212	75,066	55,821
	8 mos.	172	2,077,277	2,031	2,089,816	241,109	212,068	27,848	491,707	1,013,619	48.5	1,076,197	569,786	470,040	434,097
Missouri-Kansas-Texas Lines	Aug.	3,293	4,413,055	833,521	5,589,050	1,215,846	735,078	114,987	1,435,836	3,673,980	65.7	1,915,070	1,494,020	1,150,154	646,753
	8 mos.	3,293	26,992,810	4,471,960	33,924,851	5,681,948	5,269,401	957,299	10,570,547	23,802,944	70.2	10,121,907	7,888,534	5,488,611	2,795,014
Missouri Pacific	Aug.	7,143	14,351,711	1,734,511	17,070,260	1,793,109	2,077,866	267,472	4,468,188	9,012,827	52.8	8,057,433	5,859,091	4,932,240	2,611,006
	8 mos.	7,143	89,444,906	10,534,614	107,158,092	11,351,899	15,066,032	2,177,598	31,661,777	63,188,569	59.0	43,969,523	36,529,328	31,010,914	14,621,738
Gulf Coast Lines	Aug.	1,769	2,316,666	191,560	2,620,826	273,634	249,169	50,128	657,084	1,304,134	49.8	1,316,692	1,046,231	900,125	263,750
	8 mos.	1,770	17,684,629	1,058,620	19,496,207	2,285,750	1,979,427	387,861	5,202,132	10,394,033	53.3	9,102,174	8,032,070	6,362,761	2,293,606
International Great Northern	Aug.	1,155	1,588,631	284,438	2,037,528	239,395	245,059	31,045	581,845	1,170,604	57.5	866,924	790,317	692,398	187,145
	8 mos.	1,155	10,361,227	1,469,055	12,974,728	1,781,028	1,977,639	252,124	4,460,628	9,012,637	69.5	3,962,091	3,371,190	2,661,426	793,485
Monongahela	Aug.	172	617,689	1,173	621,131	65,104	44,915	554	128,409	242,030	39.0	379,101	253,639	160,310	258,306
	8 mos.	172	4,704,689	6,198	4,728,210	502,845	354,892	4,370	1,049,130	1,936,430	41.0	2,791,780	1,791,189	1,031,364	1,199,881

Table continued on next left-hand page

Here Are You!

PERHAPS you haven't really got a wrench in your hand...perhaps you're not actually swinging a hammer.

But it's you who are building the tanks, gun carriages, rifle springs, turret parts, bombs, steam and Diesel locomotives coming out of our plants... and hundreds of other factories in this country.

It's *you*, the American people, with the money you put into war stamps, bonds, taxes, who are turning out the weapons coming off America's production lines...a volume of mobile power that will help to assure a decent world.

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REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues: Freight	Passenger	Total (inc. misc.)	Operating expenses: Maintenance of: Way and structures	Equipment	Traffic	Transportation	Total	Operating ratio	Net from railway operation	Operating income	Net railway operating income: 1942	1941
Montour	Aug.	51	$243,873	.....	$245,336	$20,965	$50,804	$831	$55,557	$137,109	55.9	$108,227	$35,495	$73,452	$88,205
	8 mos.	51	1,758,608	.....	1,770,541	127,590	417,904	6,625	446,819	1,058,249	59.8	712,292	208,436	502,781	535,872
Nashville, Chattanooga & St. Louis	Aug.	1,111	2,034,852	$490,523	2,694,302	260,107	433,996	72,257	824,161	1,665,467	61.8	1,028,835	592,391	522,618	268,805
	8 mos.	1,111	13,998,973	2,314,932	17,649,937	1,899,713	3,201,776	587,294	6,069,718	12,341,271	69.9	5,308,666	3,103,192	2,887,784	2,172,271
Nevada Northern	Aug.	165	48,415	1,143	53,199	10,676	3,514	1,186	9,234	30,254	56.9	22,945	9,032	12,643	19,306
	8 mos.	165	438,824	6,568	470,892	81,304	27,742	9,585	76,404	242,868	51.6	228,024	86,789	103,574	126,174
New York Central	Aug.	10,917	38,242,717	11,658,317	54,607,345	7,812,252	8,998,400	569,827	16,575,462	35,602,332	65.2	19,005,013	9,503,156	7,709,914	5,836,145
	8 mos.	10,916	273,188,158	67,760,671	373,704,092	41,051,692	71,566,820	4,669,087	128,168,290	258,678,871	69.2	115,025,221	60,597,877	48,411,637	39,683,439
Pittsburgh & Lake Erie	Aug.	233	2,896,508	92,756	3,065,729	231,660	824,653	39,293	788,627	1,976,876	64.5	1,088,853	116,218	593,900	680,996
	8 mos.	232	21,254,005	556,070	22,392,463	1,863,525	6,378,517	319,610	6,330,344	15,660,458	69.9	6,732,005	538,328	4,099,759	4,816,866
New York, Chicago & St. Louis	Aug.	1,688	7,575,451	158,771	7,855,006	682,462	940,642	123,880	2,139,284	4,038,609	51.4	3,816,397	1,715,270	1,134,332	1,625,180
	8 mos.	1,688	53,715,115	1,278,138	55,950,991	4,580,453	6,794,813	1,047,209	16,560,323	30,150,946	53.9	25,800,045	12,750,649	8,512,955	9,718,163
New York, New Haven & Hartford	Aug.	1,844	7,732,625	5,957,550	14,740,234	1,509,438	1,799,458	148,113	4,179,508	8,276,137	56.1	6,464,097	3,927,497	2,873,414	2,074,743
	8 mos.	1,842	58,293,361	33,142,308	98,767,777	9,911,723	13,375,162	1,049,206	31,096,649	59,803,038	60.5	38,964,739	25,913,540	18,499,174	11,116,455
New York Connecting	Aug.	21	216,964	.....	233,772	97,481	11,237	.....	38,716	148,987	63.7	84,785	13,285	138,309	345,866
	8 mos.	21	1,846,201	.....	1,958,033	496,470	78,485	.....	319,493	907,038	46.3	1,050,995	664,215	1,236,751	2,234,115
New York, Ontario & Western	Aug.	547	561,039	145,408	752,922	86,057	137,580	20,063	328,759	592,832	78.7	160,090	126,971	64,187	53,043
	8 mos.	547	4,315,108	431,109	5,101,914	574,330	952,677	159,256	2,436,305	4,291,675	84.1	810,239	558,630	163,864	—156,936
New York, Susquehanna & Western	Aug.	262	361,941	41,772	428,266	30,926	30,063	5,486	128,526	211,968	49.5	216,298	185,173	99,773	71,284
	8 mos.	262	2,328,260	278,773	2,741,617	218,234	253,644	22,597	999,023	1,588,932	57.9	1,152,685	907,884	587,285	505,538
Norfolk & Western	Aug.	2,159	10,713,893	1,062,159	12,055,847	1,229,713	2,496,269	155,611	2,421,388	6,570,942	54.5	5,484,905	1,107,134	1,632,344	3,148,035
	8 mos.	217	82,281,227	4,770,880	89,450,436	9,241,354	18,730,410	1,253,702	18,918,920	50,226,559	56.2	39,223,877	9,737,477	13,647,970	21,446,429
Norfolk Southern	Aug.	733	627,432	30,917	682,682	101,467	70,726	29,332	204,060	427,688	62.7	254,994	134,484	103,894	99,469
	8 mos.	733	4,786,282	136,169	5,087,707	806,261	550,444	225,797	1,549,864	3,334,157	65.5	1,753,549	1,093,862	865,785	501,644
Northern Pacific	Aug.	6,889	9,002,585	873,759	10,692,661	1,365,848	1,791,038	187,764	2,841,141	6,582,820	61.6	4,109,841	2,341,956	2,704,523	2,806,139
	8 mos.	6,889	60,528,222	4,786,734	70,699,801	9,702,550	14,054,104	1,403,487	21,384,563	49,422,898	69.9	21,276,903	11,827,133	14,768,088	12,452,560
Northwestern Pacific	Aug.	342	480,351	15,642	513,692	113,160	54,330	2,514	165,067	342,482	66.7	171,210	148,247	122,343	70,387
	8 mos.	343	2,813,686	82,417	3,039,336	806,628	413,592	19,382	1,139,746	2,437,303	80.2	602,033	427,798	286,479	—127,531
Oklahoma City-Ada-Atoka	Aug.	132	130,541	1	131,821	13,379	2,390	1,272	28,953	50,263	38.1	81,558	50,918	39,400	3,166
	8 mos.	132	800,402	2	811,382	97,118	30,407	8,490	192,706	354,163	43.6	457,419	297,362	204,505	11,560
Pennsylvania	Aug.	10,215	54,601,221	17,014,319	76,947,112	9,089,200	12,604,069	814,099	23,792,890	48,335,767	62.8	28,611,345	16,148,479	14,917,766	10,326,497
	8 mos.	10,215	394,255,024	100,536,707	531,581,987	58,033,314	99,146,697	6,554,011	182,447,256	360,998,532	67.9	170,583,455	84,673,127	74,671,284	62,778,070
Long Island	Aug.	378	992,949	2,529,081	3,658,968	485,976	395,406	17,309	1,246,329	2,216,115	60.6	1,442,853	911,662	721,212	360,477
	8 mos.	378	7,386,625	14,287,552	22,704,375	2,914,057	3,476,761	86,355	9,284,040	16,199,970	71.4	6,504,405	3,541,116	2,048,829	1,081,043
Pennsylvania-Reading Seashore Lines	Aug.	406	474,345	841,948	1,361,775	105,646	94,258	11,272	474,443	705,345	51.8	656,430	493,225	329,727	297,529
	8 mos.	406	3,442,292	2,601,621	6,286,003	797,955	807,772	72,665	3,042,295	4,867,664	77.4	1,418,339	545,550	—331,342	—518,787
Pere Marquette	Aug.	2,054	3,424,613	273,015	3,926,884	571,671	746,513	67,017	1,299,878	2,803,305	71.4	1,123,579	643,209	578,636	404,709
	8 mos.	2,055	25,112,616	1,293,539	27,721,956	3,597,993	5,756,148	556,747	9,980,407	20,821,906	75.1	6,900,050	4,087,325	3,667,587	4,210,513
Pittsburg & Shawmut	Aug.	97	113,390	.....	114,286	25,056	18,545	2,551	29,278	80,540	70.5	33,746	30,040	26,029	17,929
	8 mos.	97	808,763	.....	813,825	110,123	151,104	16,511	206,236	521,803	64.1	292,022	266,250	241,867	120,786
Pittsburgh & West Virginia	Aug.	136	604,755	53	620,767	105,230	104,339	18,644	140,599	396,627	63.9	224,140	183,100	180,626	115,684
	8 mos.	136	4,029,654	350	4,170,069	667,773	792,743	155,428	939,483	2,751,722	66.0	1,418,347	1,055,600	1,103,963	979,349
Pittsburg, Shawmut & Northern	Aug.	190	119,178	.....	120,500	39,905	29,956	1,047	43,145	119,530	99.2	970	—6,205	—13,045	25,223
	8 mos.	190	981,940	.....	993,747	187,775	234,854	9,352	348,565	825,309	83.0	168,438	113,298	49,516	203,628
Reading	Aug.	1,424	7,894,899	814,880	9,164,065	817,736	1,589,925	70,382	2,743,429	5,385,474	58.8	3,778,591	2,138,665	2,063,767	1,601,915
	8 mos.	1,427	59,116,823	4,470,319	66,534,856	5,441,792	12,796,594	595,719	21,811,173	42,013,837	63.1	24,521,019	14,524,531	13,035,758	10,692,919
Richmond, Fredericksburg & Potomac	Aug.	118	1,224,159	1,129,505	2,519,478	125,338	188,680	10,921	541,854	938,286	37.2	1,581,192	191,659	93,023	237,406
	8 mos.	118	9,415,496	6,413,111	17,184,511	987,153	1,532,824	85,688	4,328,453	7,523,490	43.8	9,661,021	2,830,814	1,853,351	1,868,163
Rutland	Aug.	407	248,966	66,389	377,298	45,027	69,603	10,988	163,889	301,250	79.8	76,048	54,179	54,324	41,764
	8 mos.	407	2,001,286	325,051	2,810,146	312,212	530,774	85,726	1,276,594	2,299,688	81.8	510,458	347,369	369,092	150,334
St. Louis-San Francisco	Aug.	4,674	6,027,367	1,226,702	7,749,514	701,101	1,394,506	138,779	2,295,660	4,800,941	62.0	2,948,573	2,555,247	2,507,749	1,241,701
	8 mos.	4,743	40,582,172	7,039,806	51,250,216	5,285,301	9,378,617	1,074,664	17,151,190	34,855,518	68.0	16,394,698	13,109,630	13,222,716	7,458,806
St. Louis, San Francisco & Texas	Aug.	159	287,291	13,953	307,747	25,176	24,694	10,030	84,466	150,435	48.9	157,312	146,805	119,400	53,814
	8 mos.	159	1,863,594	55,790	1,966,348	222,022	180,474	73,567	620,347	1,143,718	58.2	822,630	740,013	526,170	97,234

Table continued on next left-hand page

LARGE, powerful locomotives are designed for hauling long, heavy freight trains, at higher speeds, to meet modern intensive traffic requirements. Could there be an operating condition more requisite of superior brake control? . . . On such motive power the No. 8-ET Equipment is giving a good account of itself. Providing for the engineman a maximum of ease and convenience in manipulation, it assures adequate, flexible control of train brakes and permits smooth handling at all times. Continued reliability of performance by virtue of inherent self-protecting features, is a noteworthy characteristic . . . It is being installed on many types of new steam locomotives, and leading railroads, realizing its important advantages, are applying it consistently to older engines as they go through the shops for reconditioning. » » »

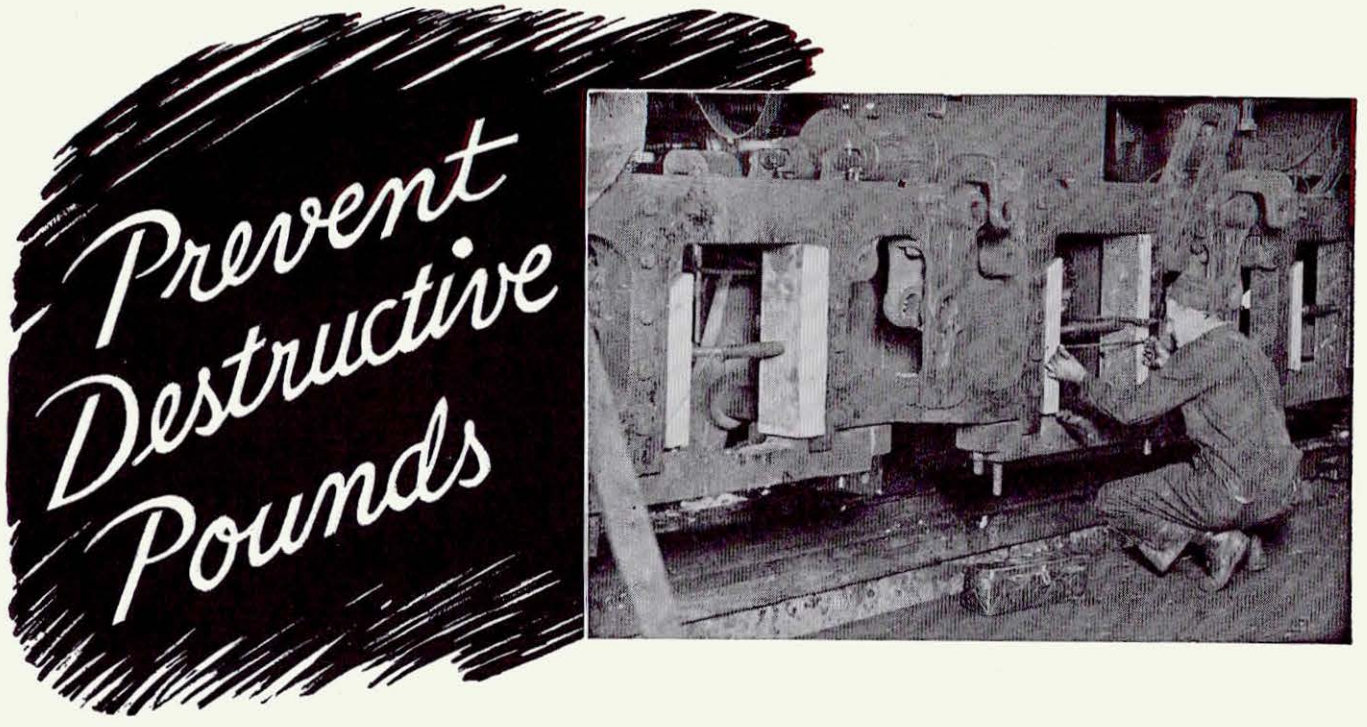
WESTINGHOUSE AIR BRAKE CO.

WILMERDING, PENNA.

REVENUES AND EXPENSES OF RAILWAYS

MONTH OF AUGUST AND EIGHT MONTHS OF CALENDAR YEAR 1942—CONTINUED

Name of road		Av. mileage operated during period	Operating revenues			Operating expenses					Operating ratio	Net from railway operation	Operating income	Net railway operating income	
			Freight	Passenger	Total (inc. misc.)	Maintenance of Way and structures	Maintenance of Equipment	Traffic	Transportation	Total				1942	1941
St. Louis Southwestern Lines	Aug.	1,617	$3,909,392	$223,323	$4,224,492	$332,722	$459,329	$95,375	$1,041,144	$2,030,808	48.1	$2,193,684	$785,036	$449,342	$635,124
	8 mos.	1,617	27,646,744	1,245,370	29,635,303	2,804,680	3,156,373	767,298	7,670,427	15,184,384	51.2	14,450,919	8,211,685	5,990,694	4,095,571
Seaboard Air Line	Aug.	4,244	6,563,123	2,927,237	10,024,401	799,322	1,324,301	194,380	2,692,200	5,369,731	53.6	4,654,670	3,229,670	2,898,807	808,551
	8 mos.	4,275	47,683,941	15,990,007	67,507,291	6,773,415	9,877,331	1,627,375	20,403,345	41,305,140	61.2	26,202,151	21,902,151	19,384,071	6,845,216
Southern Railway	Aug.	6,519	13,720,985	3,972,701	18,662,004	1,717,811	2,742,723	185,504	4,701,688	9,875,397	52.9	8,786,607	3,447,833	3,195,600	3,057,132
	8 mos.	6,519	99,201,135	20,186,184	126,437,425	13,044,364	20,180,241	1,513,945	35,328,184	73,907,098	58.5	52,530,327	25,907,948	23,944,991	20,754,799
Alabama Great Southern	Aug.	315	1,427,870	352,653	1,855,960	137,193	233,212	21,974	465,383	900,292	48.5	955,668	250,388	156,778	257,865
	8 mos.	315	9,929,772	1,720,984	12,214,099	909,551	1,747,094	168,559	3,173,519	6,303,952	51.6	5,910,147	1,785,230	1,326,665	1,501,462
Cincinnati, New Orleans & Texas Pacific	Aug.	337	2,225,249	475,723	2,801,528	245,754	487,150	31,301	621,647	1,456,094	52.0	1,345,434	516,567	453,820	454,042
	8 mos.	337	16,105,973	2,280,448	19,192,031	1,905,548	3,726,821	252,209	4,529,267	10,963,888	57.1	8,228,143	3,300,216	3,146,599	4,079,626
Georgia Southern & Florida	Aug.	398	311,168	150,760	489,734	55,293	48,381	2,459	140,245	257,946	52.7	231,788	139,922	107,064	55,196
	8 mos.	398	2,064,983	799,038	3,080,611	436,471	382,849	20,411	959,524	1,890,498	61.4	1,190,113	683,824	496,134	433,900
New Orleans & Northeastern	Aug.	204	785,188	168,765	999,786	84,715	81,702	12,614	271,117	478,600	47.9	521,186	218,476	119,777	100,998
	8 mos.	204	5,905,428	995,724	7,212,023	538,397	535,009	89,401	1,766,413	3,125,291	43.3	4,086,732	2,031,633	1,389,805	855,248
Southern Pacific Co.	Aug.	8,401	24,929,820	5,356,723	32,850,234	2,540,048	4,958,968	425,825	9,579,363	19,067,384	58.0	13,782,850	7,854,335	6,669,554	4,939,741
	8 mos.	8,528	176,138,557	31,256,432	223,759,419	18,850,036	35,984,816	3,291,973	70,123,075	139,006,799	62.1	84,752,620	51,131,048	41,885,343	31,227,143
Southern Pacific Steamship Lines	Aug.	.....	1,178	.....	1,126	.....	Cr. 518	.....	1,159	2,982	...	—1,856	—1,948	.....	.....
	8 mos.	.....	Dr. 16	230	3,206	79,136	12	136	21,726	124,163	...	—120,957	—123,355	—123,355	182,299
Texas & New Orleans	Aug.	4,394	7,354,139	1,313,448	9,153,712	879,871	975,811	132,632	2,254,890	4,543,451	49.6	4,610,261	2,655,687	2,156,954	1,404,571
	8 mos.	4,403	50,049,392	7,172,587	60,529,230	6,995,841	7,254,452	1,103,789	15,691,282	33,168,035	54.8	27,361,195	15,965,227	12,849,382	7,782,079
Spokane, Portland & Seattle	Aug.	930	1,641,383	84,945	1,835,826	122,506	133,015	13,144	487,585	805,864	43.9	1,029,962	943,593	782,773	417,507
	8 mos.	934	10,904,163	428,809	11,964,136	1,322,725	976,985	94,039	3,512,598	6,236,293	52.1	5,727,843	4,958,267	3,963,217	1,786,037
Tennessee Central	Aug.	286	284,840	17,053	321,071	80,580	48,236	6,298	105,453	253,090	78.8	67,981	47,266	33,378	45,210
	8 mos.	286	2,366,773	84,267	2,587,204	583,668	386,340	54,640	854,022	1,980,752	76.6	606,452	415,951	295,746	300,973
Texas & Pacific	Aug.	1,905	3,447,147	1,012,594	4,825,885	472,293	672,913	84,120	1,136,431	2,554,894	52.9	2,270,991	1,213,684	1,107,985	568,782
	8 mos.	1,893	22,414,189	5,757,516	30,627,210	3,237,650	4,921,150	671,524	8,390,033	18,554,768	60.6	12,072,442	7,454,242	6,611,446	4,170,940
Texas Mexican	Aug.	162	108,334	549	132,726	24,090	16,020	3,213	39,783	90,661	68.3	42,065	35,121	29,286	50,953
	8 mos.	162	975,088	3,117	1,143,715	170,097	107,468	30,616	330,378	704,277	61.6	439,438	382,308	322,373	221,654
Toledo, Peoria & Western	Aug.	239	346,139	19	349,637	46,245	7,639	20,869	65,818	153,704	44.0	195,933	180,958	162,352	20,895
	8 mos.	239	1,787,846	38	1,814,415	247,113	132,683	150,513	508,462	1,146,357	63.2	668,058	557,863	438,842	260,036
Union Pacific System	Aug.	9,852	26,802,752	4,463,737	33,511,055	4,799,083	5,137,365	401,922	8,065,305	19,732,582	58.9	13,778,473	6,499,179	5,407,497	2,949,941
	8 mos.	9,861	164,850,748	23,865,643	202,713,459	28,882,358	36,715,421	3,387,815	57,064,582	134,633,979	66.4	68,079,480	31,767,273	25,481,957	13,334,810
Utah	Aug.	111	120,553	.....	120,611	24,367	41,267	691	30,135	100,608	83.4	20,003	13,510	12,245	22,506
	8 mos.	111	857,685	.....	858,183	128,919	268,222	3,939	223,919	659,108	76.8	199,075	110,625	106,266	41,775
Virginian	Aug.	660	2,097,962	8,609	2,186,681	212,017	475,210	23,689	374,856	1,129,380	51.6	1,057,301	537,301	625,956	753,075
	8 mos.	656	17,026,718	45,908	17,710,562	1,525,848	3,780,657	204,345	3,100,603	8,979,920	50.7	8,730,642	4,603,142	5,005,767	5,284,248
Wabash	Aug.	2,394	6,383,478	592,249	7,298,994	730,701	875,585	157,077	2,176,741	4,113,818	56.4	3,185,176	1,359,399	734,630	978,350
	8 mos.	2,396	42,907,126	3,386,896	48,915,062	5,270,282	6,213,640	1,280,000	16,114,579	30,429,409	62.2	18,485,653	9,407,497	5,890,563	6,314,783
Ann Arbor	Aug.	294	418,848	7,364	450,520	44,994	79,155	14,653	169,656	322,489	71.6	128,031	65,762	54,379	68,155
	8 mos.	294	3,282,179	30,106	3,412,464	331,759	647,776	119,897	1,387,769	2,592,945	76.0	819,519	435,754	319,356	445,230
Western Maryland	Aug.	853	2,744,738	29,657	2,875,265	364,063	589,139	43,577	741,695	1,806,499	62.8	1,068,766	623,766	615,577	620,091
	8 mos.	858	19,056,505	131,120	19,732,768	2,114,314	4,276,725	360,143	5,201,310	12,496,737	63.3	7,236,031	4,276,031	4,377,509	3,962,888
Western Pacific	Aug.	1,195	3,306,098	209,681	3,600,757	286,540	353,200	73,444	997,055	1,795,875	49.9	1,804,882	1,411,081	1,259,507	642,808
	8 mos.	1,195	20,314,644	1,174,489	22,059,085	2,261,374	2,864,976	603,135	7,304,367	13,659,276	61.9	8,399,809	6,882,596	5,823,054	2,059,301
Wheeling & Lake Erie	Aug.	507	2,100,319	8	2,229,219	277,329	318,739	37,537	600,915	1,278,261	57.3	950,958	129,536	277,666	344,819
	8 mos.	507	14,923,429	15	15,708,003	1,993,723	2,630,729	320,882	4,475,165	9,736,434	62.0	5,971,569	749,338	1,890,597	2,702,254



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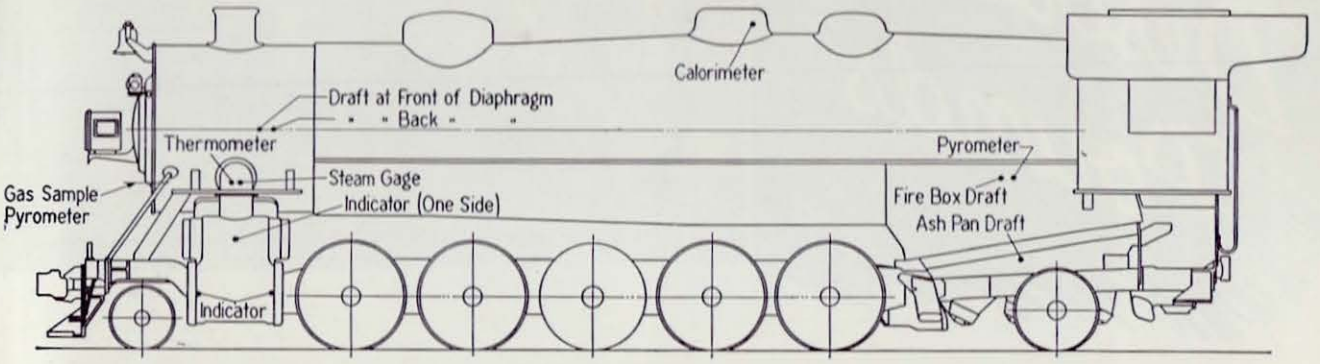

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Before me, a *Notary Public* in and for the State and county aforesaid, personally appeared *Roy V. Wright,* who, having been duly sworn according to law, deposes and says that he is the *Managing Editor* of the *Railway Age* and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, as amended by the Act of March 3, 1933, embodied in section 537, Postal Laws and Regulations, printed on the reverse of this form, to wit:
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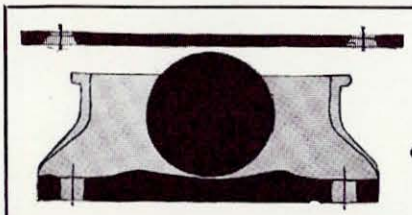

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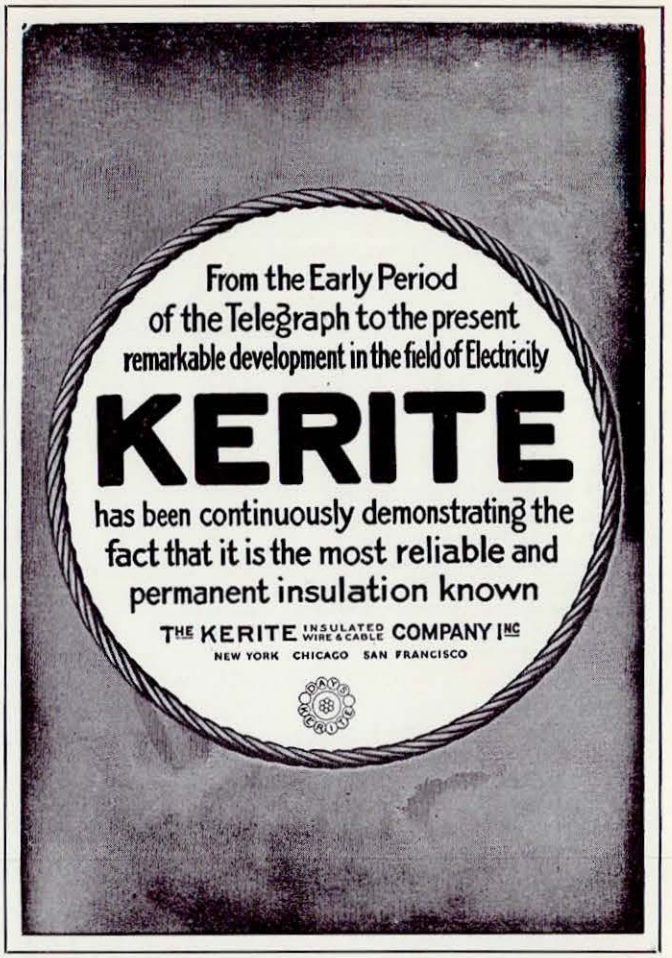
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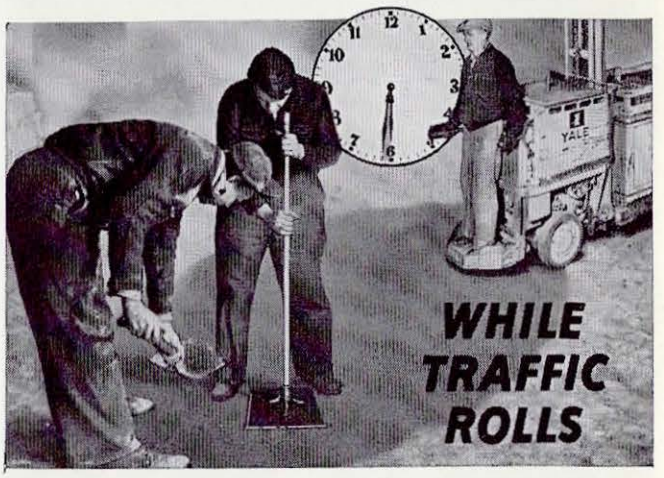

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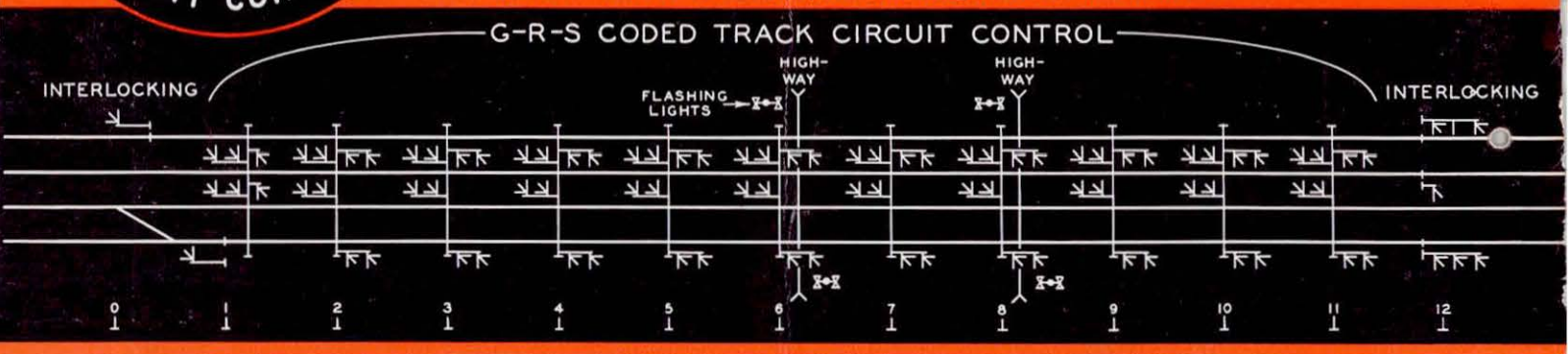

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